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ADDRESSES.

ADDRESS ON GENERAL MEDICINE.

THE MALARIAL DISORDERS OF LARGE CITIES, WITH ESPECIAL REFERENCE TO CHICAGO.

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It is a fact of familiar observation and comment that irregular cases of malarial disorder are occasionally met with at all seasons of the year and in all localities. It is equally well known that the conditions existing in large cities are inimical to the production of the malarial poison. The busiest metropolitan physician sees very few examples of frank periodical malarial fever that unquestionably originated in paved and sewered portions of his city. The rare cases that do occur are accounted for upon the assumption of "limited foci" of infection. If an excavation for building purposes is found in the neighborhood, no matter what the season of the year, it is readily assumed that the upturning of the soil is the cause of the patient's sickness. Or, if the individual has been out of the city, at any time within a period of a year or two, it is taken for granted with equal promptitude and with equal lack of knowledge of the truth, that he received the infection at that time, and that it has been sleeping or "latent" in his body ever since; and if he actually visited a region known to be malarious, even though it were several years before, the discovery of the fact is regarded as having almost the force of a demonstration of the exact time and place of intoxication. And, if no recent excavation can be discovered and no absence from the city has occurred, it is nevertheless unyieldingly maintained that some subtle emanation from the soil, somewhere, must be held responsible for the result.

In considering this problem it is well to include the questions of season, climate and locality. Contemplate the climate of Chicago between November and March when the earth is frozen to a depth of a foot or more, a good part of the time, and also covered with frozen snow—to say nothing of macadamized pavement; when the temperature has been below zero for a month and below the freezing point for several months; when building operations have been arrested and a recent excavation can not be found anywhere; and then try to account for the malarial affections that prevail on the finest avenues and boulevards of that city during and between the months named, by assuming that there has been some subtle morbific emanation from the soil!

The country surrounding the head of Lake Michigan was intensely miasmatic before it became densely populated and comparatively well drained; and the environs of Chicago are miasmatic still. Modern treatises say that the presence of malarial disorders in the region of the Great Lakes is not extensive, but is limited mainly to the vicinity of Lake St. Clair and the southern shore of Lake Erie. I have believed and maintained for many years that there were no such disorders in Chicago, that originated in finished portions of the city, except here and there a chance case from fresh upturnings of the soil. I used to think that malarial infection was easily recognizable, except in rare instances, on the basis of a strong individuality of its symptomatology; but now I think cases are common in which no man that lives or ever has lived can make a reliable diagnosis on a basis of their external phenomena. I also think that I have been seeing such cases all my life and labeling them "irregular typhoid fever" and "rheumatism" and "grippe" and "purpura hemorrhagica," or something else. I used to refer to the word "malaria" as the refuge of ignorance—and it was, and is, and will continue to be used by doctors when they do not know what is the matter with their patients. But when the diagnosis is supported by a microscopic demonstration it is different. We can ridicule an opinion but we must make obeisance to a fact. In this day, diagnosis is not always a mere matter of judgment. It may be a matter of demonstration. For purposes of medical literature and debate there are no cases of malarial disease in large cities and other localities regarded as non-malarious except such as have been proved by microscopic examination of the blood. And yet just such cases are common in Chicago; and if they are common in Chicago, it would be surprising if they did not occur at all in Milwaukee and Detroit and Cleveland and Buffalo.

It is interesting to recall the fact set forth in "Parkes' Treatise on Hygiene" that the inhabitants of the highly malarious plains of Troy, and of the extensive and pestilential marshy regions of India, are unanimous in testifying that those who drink marshy water are liable to have fevers at all times of the year, and that those who studiously avoid the use of such water are affected, if at all, only during the late summer and autumn months. It is also serviceable to remember that places inherently healthful are dangerous to life by reason of their connection with the breeding places of malaria through rivers which constitute the sources of water supply for their inhabitants. Aitken points out that the Upper Godavery Tract, one of the most virulently malarious regions of India, does not contain one acre of marshy ground; but its people drink the water of the Godavery River which drains more dense forest land than any river in the Empire. Similar illustrations might

be gathered from various parts of our own country. Professor Bemiss, of New Orleans, shows that the poison of malaria may live in water an indefinite and undetermined time, and be conveyed by currents through immense distances, even to remote islands and continents.

If these statements are true, we are warranted in using the facts upon which they are based in elucidating the causes of the prevalence of palustral diseases in Chicago and, possibly, in the other lake cities named. Many a marshy stream empties its waters into those of Lake Michigan. The prevailing current of the lake is northward toward the Straits of Mackinaw. The Calumet River which drains an extensive marshy area in the northwestern part of Indiana and the adjoining portion of Illinois empties its accumulations of organic matter into the lake three or four miles south of the "crib" or opening of the great tunnel which supplies the south division of the city with water. The Chicago River also drains a marshy region and its polluted waters passing into the lake and directed northward, away from the tunnel opening just alluded to, are more likely to affect the sources of supply of other portions of the city. Contrary winds, doubtless, disturb the ordinary direction of diffusion of the marsh poisons through the lake. It is not to be inferred that the water used by the citizens of Chicago is inferior to that of other large cities, for there is abundant evidence that it is not; but it can not be denied that it contains the products of the marshy regions surrounding the head of Lake Michigan. Nor is it to be assumed that every drop, nor even every ton of this water is thus contaminated. It will be sufficient to admit that here and there a citizen gets a dose of the morbific poison in his drink. This is a more rational and satisfying explanation of the midwinter origination of malarial disorders in Chicago and, possibly in other lake cities, than any supposition in favor of "limited foci" of infection which requires us to believe that frozen ground covered with frozen snow can belch forth miasm into an atmosphere whose temperature is below zero, and stock that atmosphere with living malarial organisms.

In the light of these facts, I respectfully invite attention to the following clinical records which represent, in the main, the observations of Dr. Frank Seward Johnson, Dr. Frank Billings and the writer, covering a period of several months.

Case 1.—A man, aged 38 years, whose health has been undisturbed for the past fifteen or eighteen years, excepting that now and then he has had vague flitting rheumatoid pains that were strikingly influenced by changes in the weather. He began to be sick in April, 1894. His sickness developed into a typical spleno-myelogenic leukemia. The first blood studies were made for me by Dr. W. A. Evans, Professor of Pathology in the College of Physicians and Surgeons, Dec. 15, 1894, and during the same month the case was used as the subject of a clinical lecture. The case is described in detail in the *Chicago Clinical Review* for January, 1895,—the description including a differential count of the blood corpuscles. The blood contained no malarial organisms. Slides preserved. Again, March 11, 1895, Dr. Evans examined the blood to ascertain the effects of the free administration of Fowler's solution and the glycerite of bone marrow. The number of red corpuscles had increased 17 per cent. and the hemoglobin gain was 8 per cent. The number of leucocytes had increased to a still greater extent. In December the ratio was 1 white to 65 red, and in March it was 1 to 55. The blood contained no protozoa. Slides preserved.

The latter part of March, 1895, the patient was admitted to the Michael Reese Hospital, and his blood was examined for malarial organisms by Dr. Sievers of that institution. None were found. April 1 a change in attending physicians occurred and the patient passed to the care of Dr. F. S. Johnson, Professor of Pathology in the Chicago Medical College. A few days later Dr. Johnson found the blood teeming with plasmodia,—intra-corpuscular pigmented and unpigmented bodies, and free flagellated forms. There is no question as to the correctness of the original diagnosis. The case is not one of malarial cachexia with ague cake. It is one of leukemia; and the patient became infected with "malaria" after his admission to the hospital. This institution is one of the best constructed and best managed of the kind in Chicago. It is located on clean sandy soil near the lake shore and there are no recent excavations to be found near it.

Case 2.—Mrs. L., aged 56 years. Residence Bowen Avenue. Has lived in Chicago eighteen years. She has been an invalid eight years on account of arthritis deformans; and for the past two years has not been off the bedroom floor of her residence. Of late there has not been much suffering but there is almost universal destruction of the joints. There are also extensive cardio-vascular changes. The urine is habitually scanty, the bowels costive, appetite, digestion and general nutrition, fair. January, 1895, was called to see the lady and found her strikingly feeble, anemic, with edematous feet and ankles, and complaining of distress in her stomach. Prescribed without making a systematic examination.

March 24 visited her without being sent for. A couple of days before I had a conversation with a medical friend on the subject of masked malarial intoxication and had become curious after more complete knowledge of my patient's condition. Found her under the care of another physician and treated for "grippe." She was very ill. The attendant consented to have the lady's blood examined. I was informed by the gentleman who made the examination that the blood contained many intra-corpuscular bodies, pigmented and unpigmented, and a few organisms that were free. Nevertheless the patient died of "grippe" a few days later.

Case 3.—L. B., aged 6 years. Residence Prairie Avenue near 50th Street. The child was born in Chicago, has never been out of the city, and has been out of the house only two or three times since Christmas, 1894. General health good. Domicile and surroundings wholesome. March 18 the patient developed a fairly typical quotidian intermittent fever. Malarial infection proved. No excavation of recent date found.

Case 4.—Miss H., aged 16 (?) has lived in Chicago many years in a good house and neighborhood. No excavations near. April, 1894, she began to be sick gradually with a continued type of fever marked by irregular fluctuations, which was labeled by the attending physician, Dr. Samuel Cole, "typhoid fever with malarial features." The fever continued about four weeks and then, after an interval of normal temperature lasting a few days, there was a relapse. The patient had taken quinin freely from the beginning. Upon the basis of two examinations made by myself during the month of May, 1894, the diagnosis of the family physician was sustained. Later the blood of the patient was examined by Dr. F. S. Johnson and the fact of malarial infection, previously assumed to exist, was demonstrated. Quinin was administered with great freedom by the mouth, rectum and hypodermatic method, and arsenic and iron were also pressed systematically, but without affecting the course of the disease. The patient was seen at this time by Dr. N. S. Davis. Her illness continued over four months, uninfluenced by treatment to an important extent, and finally came to be attended with acute pulmonary tuberculosis. Death occurred five or six weeks later—the blood of the patient crowded with plasmodia to the last. Her sputa had been examined for bacilli repeatedly during the progress of the sickness, but none were found till "between three and five weeks before death."

Case 5.—Young lady just arrived in Chicago direct from her home in New York City. Before leaving home she had an alveolar abscess which had been thoroughly drained and which was discharging freely when she arrived in Chicago. She had a chill on the train, and some hours later when examined by Dr. Cole showed a temperature of 103.5 degrees. The abscess cavity was thoroughly and frequently irrigated with antiseptic solutions. Drainage perfect. A second chill occurred that night and the ensuing fever reached 105 degrees. The next morning patient's temperature was normal. Thorough search for pent up pus was made by the consultant, Dr. L. L. McArthur, and none was found. Dr. Cole then examined the patient's blood and found it

stocked with malarial organisms. Quinin, administered freely by the stomach, had the effect of modifying the recurrent paroxysms of fever and of lessening the number of protozoa in the blood. A violent gastro-intestinal catarrh occurred at this time which made it necessary to give the antiperiodic hypodermatically. This was done; but, notwithstanding the administration of 40 to 60 grains daily and the fact that the patient was kept profoundly cinchonized, the chills and fever increased in frequency and severity. Some abscesses occurred in the site of subcutaneous injections. Malarial infection of the blood continued till the death of the patient. It seems to have originated in New York City.

(Cases 6 to 8 inclusive, occurred in the practice of Prof. Frank Billings.)

Case 6.—M. W., a boy aged 10 years. Residence Drexel Boulevard. Family history good. The boy has never been seriously sick. At home he uses Waukesha water but at school he drinks hydrant water. About Dec. 1, 1894, the boy, seeming to be quite well, had two primary incisor teeth extracted. Continuous hemorrhage resulted which was checked with difficulty. December 5, epistaxis began which finally required plugging of the anterior and posterior nares for its arrest. Between December 4 and 14, numerous points of subcutaneous hemorrhage appeared, together with a subconjunctival extravasation. The child was now exsanguinated, weak, restless, of normal temperature, and exhibited a pulse rate of 120. Spleen not palpable. Liver area normal. December 14 the blood was found to contain both intra-corpuscular and free, malarial organisms. Quinin and Fowler's solution were prescribed and the patient improved steadily. December 16 the spleen was found to be palpably enlarged and there was a slight rise in temperature. Small nasal hemorrhages occurred on two or three later occasions but the boy was fully restored within a month. The patient was seen in consultation with the family physician, Dr. E. O. F. Roler. The case simulated purpura hemorrhagica and it appears certain that the information furnished by the blood examination resulted in the saving of life.

Case 7.—J. O. B., a laborer, aged 49, has lived in Chicago fifteen years and has not been out of the city any important length during this period. Admitted to Mercy Hospital Sept. 30, 1894. Has had irregular bowels all his life, and more or less dyspepsia the last five years. Eight years ago he had severe attacks of biliary colic and four years ago he broke his right leg near the ankle. Some deformity has resulted, the skin covering which is red and scaly. About six months ago he noticed bluish-black discolorations between the knee and ankle, which, subsequently, became yellow and itchy. Still later, similar spots appeared on the thighs, and extended until they discolored the whole integument of the lower extremities. Where he had scratched the skin it had become inflamed, and a sticky discharge issued from it. On admission his liver and spleen were found to be somewhat enlarged; his urine was normal; and the lymphatics of the groins, axillæ and neck were increased in size. His morning temperature ranged from 98 to 99.4 degrees and his evening temperature between 100 to 102.2 degrees. Originally the case was regarded and treated as one of eczema. December 2 a blood examination was made and large numbers of malarial organisms were found, free and intra-corpuscular. Quinin and arsenic were prescribed, together with an occasional purgative; and the patient improved rapidly. He left the hospital, convalescent, Jan. 8, 1895. At that time his spleen was still palpable but much diminished in size. The purpuric eczema was well. On his way home he became chilled and the next day was seized with severe colicky diarrhea which continued till he returned to the hospital, completely exhausted, January 21. At this time the blood examination was negative as to malarial organisms. The patient died three days later. The autopsy, confined to the abdomen, revealed ulcerative enteritis, a chronic splenic tumor and sclerosis of the liver.

Case 8.—Mrs. F. S. S., aged 36, formerly lived in the southern part of Indiana and suffered from malarial fevers, but for two years past has lived in Minneapolis, Minn., and has had good health. She still visits her old home occasionally. During the latter part of October, 1894, she was suddenly seized with severe pain in the epigastrium which radiated toward the right hypochondrium and was especially severe in the region of the gall bladder. The pain was attended with nausea and vomiting and was so intense that it required large doses of morphin, hypodermatically, to subdue it. It recurred daily but at irregular hours, for two weeks. It suddenly shifted to the region of the right kidney but continued with unabated violence at irregular times till about the middle of December. The first diagnosis was biliary colic and the second renal colic. An exploratory operation was under consideration. The urine was scanty and the twenty-four hours' urea was about half the normal quantity; but no abnormal ingredients were present. A blood examination made Jan. 4, 1895, discovered a considerable number of intra-corpuscular malarial parasites. The free use of quinin was attended with immediate improvement and at the end of six weeks the patient returned home entirely recovered. Much of the time consumed in the treatment was required to overcome the effects of the long continued and free use of morphin. Here a correct diagnosis saved the patient from a severe operation.

(Cases 9 to 13, inclusive, occurred in the practice of Dr. F. S. Johnson.)

Case 9.—Mrs. F. was seen a week after normal confinement. She had much headache, a little fever and an irregular lochial discharge which was profuse and bloody every afternoon. Pulse 90 to 100 and temperature 99 to 100 degrees. Blood contained many endoglobular and a few free bodies. Under the usual treatment symptoms promptly ceased.

Case 10.—March, 1895. Mrs. C., aged 55, has lived in Chicago forty years and in her present home fifteen years; and has not been out of the city in three years. There are no excavations in the neighborhood. The patient was perfectly well till early in January. At that time, upon awakening one morning, she found her feet red, swollen and painful and her left arm and leg numb and weak. The paresthesiæ have continued but have been inconstant as to intensity and location—absent at times and now limited to one side and then to the other. The redness and swelling of the feet disappeared in twenty-four hours to be followed by a crop of raised, infiltrated, tender erythematous spots, varying in size from that of a silver quarter dollar to that of a five cent piece, which lasted several days and left blood stains. Successive crops have appeared at irregular intervals, and the individual spots show all stages of development and decline. Five days after the onset of the sickness the patient developed a tertian intermittent fever; but this has not seemed to make any impression on the rheumatoid phenomena or the erythematous nodes. Spleen enlarged; bowels torpid; tongue coated; skin anemic and sallow. Examination of the blood discovered small endoglobular bodies and large amœboid endoglobular bodies containing pigmented particles in active motion. Under anti-malarial treatment the rheumatoid pains disappeared; the erythematous nodes continued but were lessened in number; but the chills and fever were not benefited. At the end of three weeks of such experience the patient decided to "quit doctoring." A noteworthy feature of the case is the varying persistence of its different features.

Case 11.—February, 1895. Mrs. M., aged 27, was chilled by the weather the night she left New York City, and on arriving in Chicago she had high fever, severe headache and general pains. All symptoms except the headache disappeared in two days under the use of salicylate of sodium and a laxative; but the headache persisted. The blood contained many plasmodia. Quinin, grs. x, was administered, and the headache ceased within twenty-four hours. Two days later the patient called attention to a circumscribed edematous redness on the front surface of both ankles and over the left inner malleolus. Treatment continued, and in a day or two the lady was well enough to resume travel. Infection seems to have occurred in New York City.

Case 12.—January, 1895. Mrs. M., aged 55, has not been out of the city for many years. General health good. Last two weeks has had headache, backache, post-sternal pain and a little cough, and has been getting pale and weak. Each morning at about 11 o'clock she has slight chilly sensations followed by about two hours of fever and this by sweating. Diagnosis based on blood examination. Anti-malarial treatment was slowly successful.

Case 13.—May 2, 1895. Infant born about Nov. 1, 1894. Suckled by a hired nurse. Thrived till it was three months old. Since that time it has been having an irregular diarrhea and has gained none in weight. No fever. On careful inquiry it was learned that the nurse had been ailing a little. An examination of her blood showed malarial infection. Examination of the infant's blood revealed numerous large and a few small endoglobular bodies. The intestinal disturbance abated instantly upon substituting sterilized cow's milk for the nurse's milk, and the blood infection disappeared promptly under the usual treatment.

The foregoing cases have been selected from a total of forty-five which, with very few exceptions, have occurred since November, 1894. Without the coöperation of the gentlemen named I would not had sufficient cases for this communication. The interesting cases occurred in their practice. Those cited have been selected because they present certain striking facts bearing upon the questions of the source of infection, the diagnosis, and the limitations of the curative powers of our best anti-malarial medicines. Of the total number, thirty unquestionably originated in Chicago between December and May and, leaving out two or three, they originated in a choice and densely populated portion of the south division. It is impossible to say how many cases have been overlooked. Blood examination was confined to suspicious or confusing ailments. Similar cases are, doubtless, quite as common in other parts of the city; but I know of no observations which establish the fact. The exact source of infection is a matter of conjecture. There may be those who can conceive of protozoa disporting themselves on the lake shore of Chicago in December or January without a stitch of clothes on, in an atmosphere that is 10 degrees below zero; but it is easier to believe that the malarial organisms, like other protozoa, live in the water and obtain entrance to the human body by being swallowed. This is not intended as a denial of the possibility, nor even of the likelihood, that marsh air may be laden with them, especially the night and early morning air containing an abundance of moisture. Indeed, if it be true, as stated by H. Gilman Thompson, that they have actually been discovered in the air, there is no ground for further controversy. But so far as known every vital phenomenon manifested by these parasites requires the presence of water; and Bartley, of Brooklyn, N. Y., has demonstrated that they exist in the common source of water supply of that city—a fact that is likely to direct investigation into like channels in relation to other cities. The proofs of water infection are quite as strong as those of air infection, and there is not a doubt that impure water is responsible for the occurrence of paludal disease with immensely greater frequency than is generally known. We have been beguiled by the belief that such diseases do not originate in large cities and especially in the dead of winter; but there is good reason to suspect that they are a more common cause of death in these places than has been supposed, and that the "masked" or atypical forms which are very common are rarely identified. As to their rate of prevalence, beyond the primary fact that physicians of active practice meet with one or two cases per week in Chicago we have no knowledge, but we are free to assume that the malarial organism has no better life prospects in the middle of a severe winter than it has at other seasons of the year, and is no more likely to get into the human body. Most of the cases met have been of the "masked" variety, and, from the standpoint of external phenomena, have not been recognizable as examples of malarial infection. Some have been easily identified on the basis of the periodicity of their symptoms—neuralgic or febrile. Cases strongly simulating pernicious anemia, rheumatism, grippe, erythema nodosum, pyemia, puerperal infection, purpura hemorrhagica, biliary and renal colic, chronic eczema and digestive derangements, are herein recorded, in which it would seem impossible to reach a correct conclusion without a careful examination of the blood. In a few of the cases it appears probable that the demonstrated malarial infection was an incident and not the cause of the various morbid phenomena described.

Examples of a mild grade of temporary infection in which the health of the individual is but little disturbed are very common. In eight cases pulmonary tuberculosis and malarial toxemia co-existed—an impressive fact suggesting the idea that the diminished powers of resistance occasioned by one, predisposes to the other. In less than half the number a history of periodicity was elicited, but in most of these it required close questioning and observation to do so. The absence or presence of this feature is not safe ground for differential diagnosis. Distinction must be made between true periodicity and the erratic appearance and disappearance of symptoms or of fluctuations in their severity. The entire absence of fever—a characteristic of many cases—would be enough to obviate suspicion on the part of city doctors, especially in the winter season of northern latitudes, that the case in hand may be one of paludal intoxication. Nor is the therapeutic test a reliable guide to diagnosis. The failure of quinin to arrest febrile or other symptoms of disease is considered by many a demonstration that such disease is non-malarial. This assumption is not correct. A patient whose blood is teeming with hematozoa may be profoundly cinchonized for weeks and then die with an undiminished number of parasites in his circulation. In other cases, as every one knows, the medicine is instantly efficacious. These observations strongly support the conclusions of Golgi, Baccelli and others that under the one name are included separate and distinct varieties of microörganism. Quinin causes some symptoms to disappear while others persist; and those showing periodicity may be the ones to persist. Moreover, blood infection may continue after objective phenomena have ceased, but this is not usual. It is quite plain therefore that malarial disorders are of common occurrence in which it is impossible to say with any certainty of correctness, either upon the basis of the external phenomena or upon that of the action of quinin, whether or not the case in hand is of malarial origin and nature.

The active prevalence of such disorders in a city not known as a breeding place of their specific cause, and the facility with which they may be confounded with other kinds of disease, warrant the suspicion that in all large cities not more favorably situated, thousands of cases occur every year and escape recognition. In this connection some pointed questions can be asked as to the soundness of the prevailing opinions concerning the incubative period of these disorders. The duration of this period as stated by authoritative writers is extremely indefinite. It varies between a few minutes and several years. If the meaning of the term is limited to the time intervening between the reception of the hematozoon and the outbreak of a periodical fever, the indefiniteness of statement referred to is fully warranted; for, inasmuch as no outbreak of fever may occur at all, the patient may die while the germ is still sluggishly incubating. Conceive, if you can, of an infection of the human blood breeding and destroying for months or years before it makes its presence known. Name, if you can, any other infection that behaves in this manner. Yet this is the teaching of the day. Flint says that the incu-

bative period may last as long as four years, and W. H. Daly in a recent essay quotes an unnamed writer as saying that it may last seventeen years! Now is there any proof whatever that any such thing ever happened or is possible? It is said by writers—by Thompson in "An American Text-book of the Theory and Practice of Medicine," for example, that during the incubative period the patient may be in comparative health. Who knows this to be true and how did he learn it? Who has ever known of a case of demonstrated malarial infection lasting thirty days during which time the patient was in undisturbed health? It is not a question of opinion but a question of fact. Who knows?

It is well known that there are great differences between individuals in respect to the quantity of infectious matter required to make them sick. It is also true, as I have witnessed twice within a month, that a child or an adult may show a few malarial organisms in the blood to-day and not one a few days later. And this, without a dose of medicine. At the time of infection there were no evidences of sickness —certainly none so distinctly marked as to be recognizable as elements of a fixed disease. But suppose the parasites had triumphed over the blood corpuscles and feeding upon the hemoglobin, and multiplying, how many years would it take the man to discover that something was wrong? In view of what is known of water infection and suspected in relation to ice, milk and food infection; in view of the activity with which malarial disorders are known to originate in Chicago and reasonably suspected of originating in other large cities, is any one willing to stand before this body and say that malaria can incubate seventeen years, or four years, or three months, without showing any results? Suppose a citizen had visited a malarious region in the South for a few days or weeks a couple of years ago and returned to Chicago in undisturbed health; suppose he continued in perfect health till last December and then came down with a malarial fever; is that proof that he got the infection in the South? By no means. During the same period of time probably thousands of citizens who had not been out of the city at all were similarly taken sick. Yet this is the kind of evidence—utterly and absolutely worthless as it is—upon which the incubative period of malarial disorders is estimated. In the light of the revelations of Laveran we must, till reasonable proof to the contrary is furnished, regard every case of prolonged "latent" infection as an example where the individual did not get infected when he had a good chance, but did get infected in a locality that is not known to be, and yet is, a breeding place of malarial diseases.

The same considerations must be applied to the elucidation of the question of relapses. A person who has had intermittent fever and recovered perfectly may exhibit in the diseases of later life an impress of periodicity without having at the time any malarial infection whatever. In recurrent true malarial fevers it may not be easy to differentiate between relapses and new infections; but we may investigate and eventually be able to answer the question. Suppose a citizen of Chicago had ague, recovered, remained in perfect health a year and then had another attack of ague; is this a relapse? The affirmative would represent prevailing opinion, but is there any proof that prevailing opinion is correct? If the same person had had two attacks of pneumonia or typhoid fever a year apart, who would designate the second one a "relapse?" Nobody. There is not a vestige of proof, so far as I know, that a person ever had continuous malarial infection a year without being sick in some way. If by the term "relapse," is meant repeated outbreaks of fever during the course of continuous infection—the patient being sick with other derangements caused by the infection every day of the time—the inference is different from that given to it in relation to other kinds of disease. All our literature on the etiology of malarial diseases must be revised and put in accord with existing facts. I offer no apology for discoursing upon a subject with which many of you are vastly more familiar than myself; for familiarity breeds indifference, lack of thoroughness and a thoughtless readiness to take things for granted, and it needs to be made to stop and think now and then. The fact that the germs of malaria are often conveyed into the body by other media than the air and that in a vast but undetermined percentage of cases infection is preventable, is one of the most important and imperious before us today. It makes the duty of the doctor plain. We grow enthusiastic in contemplating the possibilities of the antitoxins, and we take off our hats to the great army of investigators who, despite the opposition of well meaning philanthropists, "will persist in destroying a few dogs and guinea pigs in order that they may teach us how to save babies," by throttling infection the instant it invades the human sanctuary; but still, after all, prevention is a still higher aim, and it is the chief glory of our profession that its best minds and purest hearts are ceaselessly active in this direction.

ADDRESS.

Before the Graduating Class of the Wisconsin College of Physicians and Surgeons, April 16, 1895.

BY U. O. B. WINGATE, M.D.

PROFESSOR OF DISEASES OF THE NERVOUS SYSTEM AND HYGIENE. MILWAUKEE.

It has sometimes seemed to me that an address on occasions like this, smacked somewhat like a dish of dessert at the end of a banquet, when every one had partaken of more than enough.

I am sure that the students in the college have had their fill; I can not conceive that the Faculty are hungry for any words from one of their number; and I have grave doubts about any of the friends present being in possession of a keen relish for anything oratorical at this time. However, we seem to be victims of custom's decree, but I promise not to weary you long.

The Wisconsin College of Physicians and Surgeons has completed the second year's work of its existence, a work that speaks for itself and needs no encomiums from me. It prides itself on having earnest, faithful and conscientious teachers, students in liberal numbers, zealous in the prosecution of their studies, and it congratulates itself on taking a position in the front ranks among the younger members of American Medical Colleges. It is the purpose of its Board of Directors and Faculty to maintain the stand it has taken, to advance from year to year, and to convince the public, and the medical world as well, by its works alone. It proposes to stand on its own foundation which has been carefully constructed, and it has no fears about its firm and lasting superstructure.

To lay such a foundation and build such a structure thereon, means much hard and self-sacrificing labor, but its promoters have practiced their profession long enough to fully realize this, and they are embued with a spirit of enterprise fully adequate to the undertaking, and feel confident that the results of such efforts will merit the commendation of a grateful public.

The great State of Wisconsin with its 2,000,000 population and rapidly increasing growth will never fail to welcome educational institutions that have engraved on their banner, "a higher scientific education," and an institution with such ideals, with a firm and steadfast purpose of its governing body, can not fail to meet with the popular approbation of our best citizens.

Gentlemen of the graduating class: It becomes my pleasant duty on behalf of the Faculty of this College, to bid you a cordial welcome into the ranks of one of the noblest, as well as one of the most ancient, of the professions that have been vouchsafed to man. Your first duty, then, is to always keep its sacred precepts before you and forever endeavor, to the utmost of your ability, to maintain its dignified and venerable character. This duty well performed, all other appropriate things will follow in proper order.

I should, perhaps, be unfaithful to my methods of teaching if I did not give you, at this time, a few words of warning relative to your own physical and mental welfare in undertaking the arduous labors inseparable from a physician's life. Statistics show that among all professional lives that of the physician is the shortest, and the reason for this physicians know full well. The demands upon your strength, both mental and physical, are far greater than in any other calling with which I am acquainted, but remember that it is not the hard mental or physical labor that kills, but the friction caused by irregular hours of rest and food, worry, disappointment in life, and the constant strain on the nervous system, so hard to regulate in the practice of medicine. Permit me, then, to counsel you to early attain as regular habits as possible, and demand for yourselves sufficient rest, else you will find yourself, all too soon, in the position of "the blind leading the blind."

The nerve force generated in your systems, you know full well, is only capable of accomplishing about so much, and what is expended in one direction will fall short in proportion in another direction. This was never better illustrated than in our modern times when we see so many falling by the wayside from troubles resulting from the strain, worry, and irregularities of the times in which we live, and you, as counselors of the people's health, should be the first to recognize the danger.

Let me counsel you to observe, with a scientific eye, what has been termed "the physical stigmata of degeneracy" of the present time, so well illustrated by the flood of printed matter that robs students of food and peace of mind. I refer more especially to that literature that treats of sudden reforms and pseudo-organized methods promulgated by pseudo-organized individuals "scarce half made up," and the idle clatter they make from time to time through the agency of printer's ink. You will find this, more or less, in all of the literature of the day, in the morning, evening, and Sunday papers, magazines, books, medical periodicals, scientific journals, in fact in all literature. Permit me to counsel you to judge them always from strictly anatomic, physiologic and pathologic grounds, aided by chemistry, and such other recognized sciences as you can depend upon. Your usefulness in life will depend largely upon the care and discrimination with which you treat and consider these matters.

Let me warn you that intelligent people are fast learning to recognize that the physician who boasts of treating thirty or forty patients in a period when he should treat but ten, even if his boast be true, is not doing his full duty to those who have intrusted their lives to his care, any more than an artisan can rush through with a piece of work, and do it properly in half the time required to do it well. The older I grow and the more I observe, convinces me that the ideal successful life is not attained by a short, spasmodic though brilliant career, so much as by the long steady pull and the attainment of a full rounded out existence intended by the Creator of our being. To attain this, one must begin early and learn the great lesson of the earliest writers, so aptly expressed by Pope: "Know thyself; presume not God to scan. The proper study of mankind is man." Having fortified yourself with a complete knowledge and absolute control of self, you will be enabled to go forth and exercise your important function in life. Gentlemen, this is the first principle! A college life is only intended, indeed it can only expect, to teach first principles. Your diploma is only an emblem of first principles and represents but an entering wedge into future knowledge. In other words, so often repeated, it is but the introduction into student life.

The profession of medicine is a progressive work. You have to deal with human life that is of itself progressive, evolving, revolving. There is no profession that demands a more discriminating conservatism, and at the same time wholesome progressiveness so much as the one you are entering. You must always maintain a strong, healthy, physical, mental, and moral character, for upon your efforts may depend not only the life and happiness of a family, but the life, prosperity, and greatness of a nation—a world.

Whatever your impressions may have been concerning your college course, there is one thing that now must forever stand foremost in your mind's eye, that of responsibility. Heretofore you have left responsibility to your teachers; now you enter a realm where you must share that responsibility yourselves.

It is interesting to one who has been a student and teacher in a medical college, to watch the changes that take place in a medical student from the time he enters college to the time of his graduation, providing he proves himself entitled to graduation. I have passed through all of their gradations. Contemplate the green, hilarious first-year man. Inclined to destroy all with which he comes in contact. Seats in the college are marred and broken, together with windows, doors, blackboards, and it seems to the teacher that his whole intent in life is destruction. He may, under certain circumstances, if there are no other provisions, even rob graveyards of their legitimate occupants. But observe the change that comes over him in his third and fourth year of study, under conscientious and faithful preceptorship; how he changes his destructive characteristics. He be-

comes an interesting, pleasant personality to his preceptor. He is earnest and painstaking in all that pertains to reality in life. He may caution the students in the first and second years against their destructive proclivities, and tell them they ought not to do so. He is inclined to treat his preceptor with a higher degree of respect than ever before. He takes more interest during the lecture hours, and as he advances to the final examination, before he enters the sacred duties of the medical profession for life, he may show to his preceptor that he still proposes to rob graveyards, but in a far different sense from that in which he began his work. He proposes to snatch from the grave, so far as the armamentarium of medical science will permit, the devoted husband and father, the tender wife and mother, the lovely bud of childhood, the brother, the sister, the all that is sacred to the human heart. He does not hesitate to use his anatomic knowledge for the benefit of justice in disclosing crime and wickedness in the dissecting or autopsy room and on the witness stand, regardless of the unjust criticism that frequently follows. Gentlemen, you must be patient. It is a part of your education to bear the darts that fly thick and fast, at times, about you. You must also bear with the inconsistencies of life, the deprivations of comfort and happiness, and seek satisfaction in the inward feeling, which you must try to develop at all times, that you have done your duty. Duty well performed is always sure of its reward, and the science of medicine, your chosen profession, a science that is linked with all other true sciences has nothing to fear, and you, as its true disciples, I am confident will never flinch from duty.

Remember, that while the practice of your profession is markedly different from what it was a century ago, your duties are none the less sacred nor your responsibilities none the less heavy; neither will they be while love kindles the fire of the noblest aspirations of human life, thought clothed with divine majesty scans the pages of the history of life and death, and science with its piercing light penetrates into the darkness of the unknown and reveals the truth.

LECTURES.

LECTURES ON INTRACRANIAL SURGERY.

IX.—THE OPERATIVE TREATMENT OF IDIOCY.

BY EMORY LANPHEAR, M.D., PH.D.
ST. LOUIS, MO.

It is with a feeling of diffidence that I take up the subject of the surgical treatment of idiocy, for I am uncertain as to the advisability of such measures; yet as medical literature, some two years ago, was glowing with accounts of wonderful results obtained, and periodicals of to-day contain articles condemning the plan as unscientific and valueless, the subject deserves more than passing notice.

HISTORY OF THE OPERATION.

The proposition to relieve idiocy by operation originated in America. Dr. William Fuller, of Grand Rapids, Mich., who was at the time Professor of Anatomy in the Medical College of Montreal, Canada, at a meeting of the Montreal Medical Society, in 1878, read a paper upon the subject, with the report of a case operated upon by himself. Moreover, Louis Bauer, M.D., M.R.C.S., Eng., the distinguished Honorary Professor of Surgery in the Marion Sims College of Medicine, of St. Louis, operated for microcephalus at the St. Louis City Hospital in 1871. The microcephalus was of the acquired variety, accompanied by petit-mal, as well as the convulsive form of epilepsy (sometimes as many as twenty spasms in twenty-four hours). Dr. Bauer claimed that the cerebral trouble was due to premature ossification of the cranial sutures and so removed a large segment of the skull for the purpose of giving space for growth of brain. Recovery from the operation was speedy, and the boy disappeared. Five years later the patient when seen by Dr. Bauer was so changed in physical and intellectual condition as not to be recognized. He is now the proprietor of a general store in Arkansas and is a successful business man. So far as I can learn this was the first operation ever made for microcephalus; and although the object was relief from epileptic seizures, and not for the cure of idiocy, it can scarcely be denied that to St. Louis belongs priority in operation for microcephalia.

Scarcely any attention was paid to the essay of Dr. Fuller, except a few condemnatory comments and the subject remained in quiescence until 1890, when Lannelongue, of Paris, startled the medical world by boldly declaring that for the unfortunate idiot relief had been found in operation, as demonstrated in a large number of cases. Following the publication of his report many operators in Europe and America hastened to open the skulls of microcephalics and to rush into print almost before the wounds were healed. Happily the "epidemic" is over and we can now view the results dispassionately. As no recent articles have been published giving reports of progress, I shall base my remarks chiefly upon my own cases.

My experimental work in the operative treatment of idiocy has consisted of twelve operations, covering all classes of idiots in which there is even a faint possibility for improvement. While my cases are, perhaps, more numerous than any other American operator's, they do not approach Lannelongue's reports either in number or brilliant results; at the same time, the cases are not, like his, limited to microcephaly alone, and hence are perhaps of more value in a general way.

VARIETIES OF IDIOCY.

All idiots may be classed under the heads: 1, congenital; 2, microcephalic; 3, eclamptic; 4, epileptic; 5, hydrocephalic; 6, paralytic; 7, cretinic; 8, traumatic; 9, inflammatory. They all have something in common; thus, in addition to the mental trouble many are deaf mutes, or are blind, and anesthesia as well as anosmia may be present; some learn to walk late, or not at all, and most of them have a shambling gait, which in the cases of microcephalia, closely resembles that of the anthropoid apes; a general restlessness, vacant stare, thick and everted lips, etc. Altogether the proper classification is rather difficult, but the following distinctions should be noted:

1. In congenital, or genetous idiocy, the subject is often dwarfish; deformities are numerous, particularly a high vaulted palate, with teeth irregular and decayed; deficient growth of nails; eyes rolling or squinting; mental condition a total blank.

2. In microcephalic idiocy the head is small, but the physical defects are less marked than in the genetous form; there is some tendency to learn some

things, and as the subjects grow older they improve under training and present more physical and mental energy than is found in other classes. There are two varieties: *a*, congenital, in which the mental weakness is due to agenesis of brain structure, the synostosis being secondary to the cerebral defect; *b*, acquired, in which the brain has begun development but the bones, for some reason, too suddenly unite and cease to grow, with a consequent cessation of cerebral development or even retrogression, until the child from being more or less intelligent becomes a complete idiot.

3. Eclamptic idiocy succeeds infantile convulsions. As the child develops, although there may be little trouble with motion or sensation, it is found that it is capable of acquiring very little education.

4. In the epileptic form the child may have been primarily well-equipped mentally, but after the destructive paroxysms appear there is more or less marked deterioration; later on, if anything be learned in the interval between epileptic seizures, a new attack erases it from the memory. Such patients are apt to appear to be on the boundary between imbecility and insanity.

5. Hydrocephalic idiots present the usual signs of hydrocephalus. Some cases are due to porencephalia (ventricular dropsy, with more or less complete absence of the upper part of the hemispheres) while others depend upon dropsy of the arachnoid. Albers, of Bonn, makes this distinction: mental obtuseness and paralysis indicate effusion into the ventricles; while restlessness and mental derangement point to fluid in the sac of the arachnoid.

6. In paralytic idiocy the patients are tractable and docile, but the same destructive lesion that renders the patients completely paralyzed affects the centers of intellect—hence they are hopeless.

7. Cretinism is a form of idiocy quite rare in America, but very abundant in certain parts of the world (Switzerland especially) where the condition of soil, air, water, etc., give origin to it. After the sixth month the condition is readily recognizable: bodily development is very slow; the baby, though weak, is remarkably fat and appears swollen; the skin is often dusky, or yellow, but sometimes natural in color; the head large, and fontanelles wide, with sutures sometimes disjointed; the expression stupid, appetite voracious, belly swollen immensely, neck thick, but the extremities attenuated. Later, teething is not completed for many years, but is accompanied with offensive salivation and convulsions; the child does not learn to stand before the sixth year; about the seventh year it begins to make a few articulate sounds in a hoarse but shrill voice, with great difficulty in speaking. The disproportionately large feet, attenuated legs, swollen belly, cumbrously large head drooping over, an illy developed thorax—these are unmistakable.

8. Traumatic idiocy usually may be traced to injuries by attempts at abortion or by use of obstetrical forceps. In degree the mental impairment may be severe or trifling, and in continuance either temporary or permanent.

9. Inflammatory idiocy is that form which follows attacks of so-called "brain fever"—meningitis with more or less exudate.

Low grade imbeciles differ very little from the congenital idiots, except in extent of mental development; they think, feel and speak, and can be taught some simple things.

WHEN OPERATION MAY BE DONE.

The earlier in life the operation can be done the better; certainly it is not probable that any benefit can be expected in idiots of more than 8 or 9 years of age. Nor are all idiots fit subjects for this experimental operation. Congenital idiocy may possibly be improved through the increased flow of blood set up by the operation. Microcephalic idiocy offers decidedly the best field, especially in the form which Binnie (*Kansas City Medical Index*, May, 1891) has termed "acquired microcephalus." It is scarcely justifiable in pure eclamptic idiocy. In epileptic idiocy there may be a chance for improvement in some cases. In hydrocephalic idiocy, tapping the ventricles and establishing permanent drainage may perhaps do good in the first group; but better results are to be anticipated in the second class (arachnoidean hydrops). In traumatic idiocy, nearly as much can be expected as in traumatic epilepsy or insanity. In inflammatory idiocy, operation is certainly inadvisable. No operation is justifiable in cretinism; the prospects of improvement from the use of thyroid extract seem to be very bright indeed; and this line of treatment should be further investigated.

PRELIMINARY TREATMENT.

On the day before the operation the patient is chloroformed, and the head carefully shaved. The whole scalp is scrubbed thoroughly with soap and water; dried carefully, washed with sulphuric ether; again subjected to soap and water, and finally douched with a solution of bichlorid of mercury of the strength of 1 to 1000. The head is then enveloped in bichlorid gauze, held in place by a bandage.

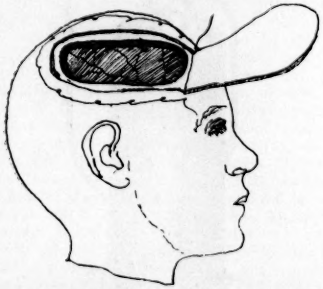
PREPARATION FOR OPERATION.

The child being put completely under the influence of chloroform (ether never being employed, since it causes too much congestion of the field of operation), the dressings are removed from the head and the scalp scrubbed with a saturated solution of permanganate of potassium, followed by a saturated solution of oxalic acid; it is then rinsed with bichlorid solution, and the head wrapped in towels wrung from the same. This is the last use of any antiseptic solution in the operation, as plain hot water, previously boiled, must be employed for irrigation and for wetting the "sponges," which are not sponges at all, but balls of iodoform gauze which will be thrown away as soon as used. Every instrument must have been boiled for twenty minutes immediately before using, and the hands of operator and assistant must be carefully disinfected by washing in the solutions used upon the head. These apparently trivial details in asepsis may seem superfluous to those who have seen excellent results in the work of men who are absolutely *dirty* in their methods; but if a surgeon expects to maintain a low mortality rate, especially in cerebral surgery, the closest attention must be paid to the most minute points of possible contamination. Being, therefore, certain that everything is in perfect readiness, the preliminary suturing may be done. Beginning at the median line, just at the margin of the hairy scalp, a suture of strong silk is introduced; stitches of about three-fourths of an inch being taken, the line of suture is carried backward to a point near the occipital protuberance, then turned toward the side and brought down to near the level of the ear, and thence carried forward to within some two inches of the point of beginning. By this prelimi-

nary stitching, the bleeding may be controlled far better than by an Esmarch bandage passed around the head. This step is perhaps the most important in the whole operation, because every drachm of blood lost will weigh against the recovery of the little patient. Children stand the loss of blood poorly, and I am sure that many cases have been lost on account of want of attention to hemorrhage. The condition which is called "shock," so frequently met after operations on the head, may, in most cases, be ascribed to loss of blood.

THE OPERATION.

The field of operation having been thus entirely surrounded, a large flap in the shape of a horseshoe, with its base forward, is quickly cut (with a single stroke of the scalpel clear to the bone) and raised. In the flap the pericranium is included; at the sutures there are some adhesions, but these are readily freed by the handle of the knife. The bleeding points, few in number, are seized with hemostatic forceps, and the flap enveloped in bichlorid gauze wrung out of hot water. Hemorrhage having been completely checked, an attempt should be made to go through the skull with the sharp gouge, which is preferable to the mallet and chisel and to the trephine whenever



the bone is soft and thin enough to permit. I have seen disastrous results from the use of the trephine, and have myself lost one patient under circumstances that seem to point to the use of the mallet and chisel. But if the bone is too hard for the gouge, a half-inch trephine is brought into use, and a button removed in the usual manner. The opening must now be enlarged. For the purpose, Parkhill's new craniotomy forceps answer admirably, as do also Keen's. The opening is, by means of these forceps, rapidly extended forward until it measures at least four or five inches in length and from an inch and a half to two and a half in width, its anterior margin being as near as possible to the border of the hairy scalp; it thus exposes a considerable portion of the frontal convolutions, as well as a part of the motor area. If one is very careful, there should be no wounding of the vessels of the meninges, but if inadvertently injured, a needle, armed with fine juniper-oil catgut, must be inserted through the dura, carried under the vessel, and brought out a line or more beyond, and the gut tied—thus ligating *en masse*. The edges of the hole are now smoothed by a small rougeur, and the fragments of bone carefully washed away. The appearance of the wound is now as shown in illustration.

At this point the sutures surrounding the site of operation are removed; and bleeding vessels caught and tied. While the wound is being irrigated the flap is uncovered and washed. The whole field is now dried and covered with iodoform; the flap replaced and stitched with a continuous suture of medium size. A few strands of gut are inserted at the lower angle of the wound and pushed well up beneath the flap to insure drainage. The enveloping towels are now removed, the scalp washed and dried, the wound hidden by powdered iodoform, and dressed by using a considerable quantity of iodoform gauze next to the head, then a larger quantity of bichlorid gauze, then cotton and a bandage. As thus performed, the operation can be completed in less than thirty-five minutes.

AFTER TREATMENT.

The child is now put to bed and treated as if suffering from any other wound. Usually there is very little trouble after the operation. Most of the cases I have operated on have been able to sit up in bed the following day, and some have gone on in their little play in a few hours, as if nothing had happened. This first dressing is allowed to remain until the seventh or eighth day, unless some special reason exists for its earlier removal. At the end of a week, primary union will be found to have occurred, and the dressings are to be replaced by a close-fitting headdress of bichlorid gauze, cotton and bandage, which is to remain until the time for the second operation. This will be in two or three weeks, according to the condition of the patient. The child is then chloroformed, the dressings removed, and the scalp again shaved and washed with soap and water, ether and bichlorid solution. It is not, however, necessary to do this on the day preceding the operation, as in the first instance, because the scalp is still in an aseptic condition from the first operation.

The second operation is precisely similar to the first, save that it is made on the opposite side of the head. One week after the operation, if everything has gone well, the permanent dressing may be put on and the child allowed to go out; so that the total period of stay in the hospital need not exceed four weeks, and one may be able to cut it down to three.

It will be noticed that my mode of treating these cases by a large oval opening, differs considerably from Lannelongue's operation, which has been practiced by most American surgeons, notably Keen and Wyeth, and which consists of a large, long flap made in the shape of a U, V, or T, the dura being opened only when there are evidences of pachymeningitis; but I have seen the opening close up within a few weeks in the Lannelongue operation, with return of all the bad symptoms for which the craniotomy had been made. In none of my cases has this occurred, and I believe the larger opening affords more room for improvement.

Consideration of the very important question of "*What Are the Results?*" with a report of cases, must be deferred until the next lecture.

(*To be continued.*)

Malpighi's Memory in Japan.—A recent number of the *Sei-I-Kwai* medical journal records a bicentenary celebration held by the Tokya Microscopical Society in honor of Marcella Malpighi, the anatomist of Bologna, who was the first to describe the minute anatomy of the kidneys and other organs in 1694.

ORIGINAL ARTICLES.

THE PROCESS OF FORCED DILATATION WITH IMPACTED NEBULA.

AUXILIARY TO THE MEDICAL AND SURGICAL TREATMENT OF THE EARS, NOSE, THROAT AND CHEST, WITH ILLUSTRATIONS OF PORTABLE APPARATUS. SOME SUGGESTION TO GENERAL PRACTITIONERS AS TO THE SELECTION OF MEDICINAL AGENTS AND AS TO MEASURES FOR CONTROLLING PULMONARY DISEASES.

BY GEORGE F. HAWLEY, M.D.
CHICAGO.

Through new discoveries and improved methods for preventing diseases and restoring health, the general and special practice of medicine and surgery is gradually becoming a practical if not a positive science.

While marked progress has been made all along the lines of general, and in some lines of special practice, it is a lamentable fact that there have been but few improvements in the facilities, and none in the methods, of treating diseases of the air passages locally, for the past ten or fifteen years, until the discovery of a new process for preparing and administering impacted nebula by forced dilatation, and the invention of an instrument for accomplishing the same. With the exception of this discovery and invention, the means and measures employed at the present time in the local treatment of the air passages are identical with those of the past.

In a former paper entitled, "A New Apparatus," contributed to and published in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION May 12, 1894, page 702, the construction and operation of the Standard Dilator, the process of forced dilatation and the methods of using the same in the treatment of the ears, nose, throat and chest was illustrated and fully described. Judging from the number of physicians who have asked for additional information, both in person and by letter; also from the fact that some have, on the advice of manufacturers or dealers, attempted to carry out this process by the use of nebulizing inhalers or other similar but improperly constructed apparatus, I conclude that neither the construction of the apparatus nor the principles underlying the process of forced dilatation with impacted nebula, nor the motive that prompted the writing of the paper is generally understood. Actuated solely by a desire to benefit the profession, and to add my mite to the sum total of medical science, I accepted the opportunity of being the first to call the attention of physicians to this discovery and invention through the medical press, an opportunity which I am persuaded but few of my medical brothers would have declined under similar circumstances. I was not then, am not now, and never was financially interested or benefited by the manufacturing or sale of any instrument or apparatus for physicians' use.

Manufacturers and dealers have at their own suggestion conferred upon me the empty honor of naming after me, instruments and apparatuses similar in construction to those used in my practice. That, and the gratification of having aided in pioneering their use, is all the remuneration that I ever received or would have accepted.

The purpose of this paper is to call attention to the Hand Dilator and a recently perfected portable apparatus which constitutes a complete outfit to be used in the process of preparing and administering impacted nebula by forced dilatation. In addition to being well adapted to the scientific and expeditious treatment of the ears, nose, throat and upper air passages, it brings the lungs and deeper air passages completely under the control of the physician.

The apparatus herewith illustrated consists of a receiver of eight gallons capacity, with pump, regulating meter valve, conducting hose, and cut-off, all combined. As the complete outfit weighs less than eighteen pounds, its portability adapts it to use at the bedside of the patient in home, sanitarium or hospital. It is equally well adapted to the use of the general practitioner in the treatment of office patients.

The Hand Dilator is attached to the cut-off and held in the hand in the same manner that sprays are attached and held. It consists of a strong 2 ounce glass jar surmounted by a dome to which the nasal, the laryngeal, or pharyngeal tubes or nozzles can be adjusted or changed from one to another instantly.

The percentage of the medicament in the impacted nebula can be regulated from the minimum to the maximum strength instantly or gradually by turning a thumb-screw. This obviates the preparing or keeping solutions of different percentages of strength.

The Hand Dilator is as efficient as the Standard Dilator in the preparation and administration of any selected medicament into any air passage or cavity without liability of lacerating tissue, or causing hemorrhage.

As impacted nebula is practically dry, it can be administered into the lungs without injury or undue irritation. Into the Eustachian canals and tympanic cavities through the nares, with or without the use of a catheter; into the nose or throat without flooding the cavities with a disagreeable and disgusting excess of aqueous or oily solution, which the patient

finds it necessary to immediately eject by hawking, spitting, and blowing the nose.

Although impacted nebula is practically dry, its administration by forced dilatation will remove deposits of tenacious mucus or incrustation from the nose or throat quicker and easier than the same can be removed by liquid sprays.

For fully illustrated instruction in the methods of administering, and the physiologic and therapeutic difference between forced dilatation, inhalation, Politzerization and catheterization, see my paper published May 12, 1894. The method of using the Standard Dilator or the Hand Dilators is essentially the same.

Notwithstanding exact nicety is required in all the details of preparing and administering any selected medicament by this process and apparatus, it is nevertheless confidently expected that its adoption and use will inaugurate an era of improvement in this particular branch of practice, and lead to the discovery of other means and measures whereby cures may be effected in the upper air passages without a resort to the supplementary surgical interference so frequently found to be required during the past, while by its judicious use those afflicted with pulmonary diseases may be saved the expense and fatigue of long journeys in wandering over the earth in an effort to prolong life through climatic influence.

While the propriety of a change of climate as an expedient may for obvious reasons be questioned, the free, full and unobstructed breathing of air is acknowledged to be an absolute necessity for the preservation of health and life, for the well-known reason that it is through the respiratory function only that oxygen can enter the blood and carbon dioxid can be eliminated. The importance of oxidation in the chemic and physiologic processes by which the food stuffs are changed into molecules of bioplasm for the formation of the white blood corpuscles is well known. It is also well known that it is through the aid of the oxygen carrying hemoglobin of the blood that the molecules of bioplasm constituting the white blood corpuscles are elaborated in the processes of assimilation, through which tissue metamorphosis is brought about. Thus a partial equilibrium in supply and waste is maintained.

The heat resulting from respiratory combustion is dissipated in part through physiologic evaporation. The remainder being stored as force, in ganglionic nerve centers, to be expended as required.

Although respiration is such an important function there are but few persons who breathe enough air, none too much and many not enough.

There are persons who have no control over their respiratory apparatus. They can not expand or contract their chest or take a long, full, deep breath. They breathe but little air and as a matter of course the purer it is the better for them. Such persons can not practice lung gymnastics; they do not know how, and many of them can not be taught. Forced dilatation is their only help, for by it they can be made to breathe full and free. To the very feeble, forced dilatation affords all the benefits of lung gymnastics and outdoor exercise without fatiguing exertion. It is efficient in developing the chest of the young or middle-aged and for maintaining the lung capacity of those who are old or exhausted by mental or physical work. It affords relief to those whose respirations are impeded by atmospheric or other influences; influenza, hay fever and asthma being extreme examples.

The prevalence of milder and more obscure forms of impeded or slightly obstructed respiration leads to the conclusion that there is some peculiar property in the air of every locality which, during certain seasons of the year, affects the air passages of many, while others are exempt. To this, or to some other equally obscure and unpreventable cause, may be traced many maladies which are primarily initiated in the air passages, and which on account of obscure and misleading indications are neglected during the early stages. The affection results in varying degrees of stenosis or occlusion of the upper or deeper air passages, or some of them. The objective and subjective symptoms being entirely different from those attending recognized and well-defined cases of coryza, influenza, hay fever or spasmodic asthma, not only in the absence of cough, excessive secretion, congestion or inflammation, but in the fact that such patients rarely complain of difficult breathing. The subjective indications being few and the objective obscure, the physician is often misled through the patients declaring that their lungs are good and that "there never was a case of consumption in their family." They simply complain of "that tired feeling" and from that alone many of them seek relief. Some of them before, others after, and not until after, swallowing the contents of several bottles of a widely advertised nostrum find their way to the family physician or general practitioner, who after a casual examination generally prescribes tonics and rest. But "that tired feeling," complicated by other evidences of decline, often continues until the patient is pronounced incurable and advised to seek relief in a change of climate. But as there is no climate or locality where all are absolutely free from obstructed or restricted respiration, there is none where mankind can be free from the resulting sub-oxidation, mal-nutrition, and all the evils which that condition implies.

The fact that there are many persons who do not breathe through both nostrils, and some who can not nor have not breathed well through either for years, may be mentioned as an example of obstructed respiration, and of which many are unconscious until their attention is called to it. This fact leads us to conclude that if the lungs of such patients were as completely under their observation as is the nose, they could be made to realize a simlar condition of stenosis or occlusion in the deeper air passages.

General practitioners will, I trust, pardon me for suggesting the necessity for a thorough examination of the chest in all cases of illness. For the reason that the important part which the lung plays in the elimination of the waste products, water and carbonic oxid, can not be over-estimated. A quantitative and qualitative analysis of the respiratory exhalations from any one suffering with any form or degree of illness will disclose the fact that the equilibrium of supply and waste through respiration is not maintained, due to obstructed functional activity on the part of the lungs. It therefore follows that a restoration to the normal capacity, and to functional activity, and the consequent restoration of an equilibrium in supply and waste, through respiration, is an important factor in the restoration and preservation of the health.

While the pharmacist and instrument-makers have

placed agents in the hands of physicians to control most maladies, either by therapeutic measures or surgical procedures, no agent was at hand by which diseases of the deeper air passages or those resulting from and continuing on account of obstructed respiration could be controlled, until the discovery of the process of forced dilatation with impacted nebula and the invention of the dilator.

After nearly two years' experience with a four-bottle set of the Standard Dilators, and a set of Hand Dilators, I now feel justified in attributing to their use as auxiliary to other medical and surgical means and measures, a more rapid and constant improvement in all cases treated, and the recovery of several persons in the first and second stages of pulmonary tuberculosis, others of long-standing asthma, others of impaired hearing from ankylosed ossicles, hypertrophied membranes and thickened and retracted drum-heads—recoveries that would not in all probability have occurred under the usual methods of treatment.

While it is well known that apparently miraculous recoveries do sometimes occur under all systems of treatment, and occasionally without treatment, yet where there is an almost unbroken uniformity in the improvement of a large number of persons of all ages, sexes and occupations, afflicted with almost every form of diseases of the air passages, where recoveries are frequent and failures are rare (as has been the case in my practice during the past year) am I not justified in concluding that such results are something more than a mere coincidence?

It is not the purpose of this paper to announce a cure for consumption or any other disease, but to call the attention of conservative physicians to an apparatus and process that is indispensable in the rational treatment of the upper air passages, and the only means by which pathologic conditions of the deeper air passages can be reached or controlled.

Notwithstanding the prevalence of pulmonary diseases, there are comparatively few physicians who include the chest in the limit of their specialties. This neglect of the lungs is due no doubt to the fact that inhalations have been found inefficient, while clinical experience has proved the impracticability of administering an efficient sterilizing agent or germicide, either internally or indermically.

The use of the inhalers has been abandoned by many leading special and general practitioners, for the reason that it has been found to be impossible to introduce into the deeper passages the smaller bronchia or air cells of the lungs, either a healing or a sterilizing agent by inhalation. This fact has recently been emphazized in a series of experiments on the lower animals by Dr. H. Thomas and his assistants. These experiments prove it to be impossible to introduce by inspiration the atomized medicament contained in nebulous vapor, into the unobstructed smaller passages and healthy air cells of the animals experimented upon. The Doctor (in his paper published in this JOURNAL) states that in his clinical experience with inhalations, the most rapid improvement occurs during the first ten days treatment. This coincides with the observations of others, who have also observed that if the lungs be invaded by bacilli or are involved in degenerative or destructive processes, that the improvement is frequently followed by a more rapid decline. Hence many observers have come to the conclusion that, no matter how the inhaler may be constructed, or how perfectly the inhalant may be prepared by its use; whether hot or cold, moist or dry, or whether a volatile or a nebulous vapor, inhalation tends to promote and hasten instead of modifying and arresting degenerative or destructive processes in lung tissue.

In my opinion there no longer exists any excuse for neglecting the treatment of those afflicted with pulmonary diseases, or for continuing disappointing and discouraging experiments with inhalers or inhalations. A physician can now procure an outfit by the use of which, in the administration of properly selected medicaments by the process of forced dilatation, he will be enabled to treat diseases of the chest with a uniformity of success equal in degree or ratio of recoveries to that following operative surgery in the treatment of other desperate maladies.

To obtain satisfactory results, the technique of forced dilatation must be carried out in detail. Physicians are not apt to do this, unless they understand and appreciate the distinctive difference between inhalation, inflation and forced dilatation, and also the difference between an impacted nebula and the smoky nebulous vapor evolved from the various nebulizing inhalers.

I am not urging a distinction where there is no difference. I am trying to make you realize the distinctive difference as I do, and as do most physicians who use the dilator for administering impacted nebula by the process of forced dilatation.

Although the efficiency of this apparatus and process can not be fully demonstrated upon dogs, cats or other dumb animals, for the reason that impacted nebula can not be forced into the deeper air passages without the intelligent coöperation of the subject operated upon, nevertheless when administered to persons who passively coöperate, its physiologic action on organs and functions and its therapeutic effect on pathologic conditions may be determined by an improvement in organic action, as manifested in the rate and character of the pulse and respirations; in an equalization of circulation and temperature; in an improvement in the processes of digestion, nutrition, assimilation, secretion, excretion and elimination, all resulting from increased aeration, through which the equilibrium in supply and waste is maintained.

Armed with the dilating apparatus, the physician is enabled to expand the collapsed smaller bronchia and air cells, and to detach, dislodge and remove by explosive expulsion such deposits as have accumulated from excessive secretion or other morbid processes. It should be borne in mind that it is behind these obstructions that the bacilli find a domicile conditioned by excessive moisture and high temperature for their vigorous activity. In the earlier stages of pulmonary tuberculosis the obstructed areas are circumscribed. In these circumscribed localities the moisture is excessive and the temperature high, as moisture can not evaporate in tubes, cells or cavities in which air through respiration does not circulate. The excessive heat and moisture in these circumscribed localities can only be absorbed or dissipated through the physiologic process of respiration and evaporation.

Let all controversy be avoided as to whether the bacilli initiate the pathologic condition by an infectious invasion of previously healthy tissue, or whether the arrest of the physiologic function of respiration,

and evaporation in circumscribed localities result in a condition of high temperature and excessive moisture sufficient to develop the active and destructive bacilli from germs that previously were and otherwise would have remained inert and harmless.

Every physician has either formed his own, or else he has adopted the opinions of others on this subject. Beside investigation as to the initiative cause belongs of right to the domain of hygiene and preventative medicine.

Active and energetic remedial measures should be directed against conditions as we find them. Temporizing expedients should be discarded and especially so when an agent is at hand by the use of which the physician can remove the immediate cause and otherwise control present conditions, regardless of the remote or initiative cause. When a farmer discovers that the bugs are devouring his potato vines he does not stop to inquire which or what was the primary cause. It is sufficient for him to know that if he does not kill the bugs that the bugs will kill the vines. When on examination the physician finds the lungs of his patient infested by tubercular bacilli he knows that if does not kill them they will kill the patient. He knows that the area of lung capacity as evidenced by chest expansion is reduced, that the air passages and cells are collapsed or are obstructed in circumscribed localities. He also knows, or should know, that it is behind these obstructions and beyond the reach of inhalations that the bacilli find their favorite pabulum. That it is there they feed, fatten and propagate; that it is there the excreta and ptomaine is ejected and emitted which poisons the fountains of health, prostrates and makes sickly all the central forces of life.

Owing to obstructed blood circulation in the circumscribed localities, on account of solidification, through congestion, fibroid or tubercular degeneration, it has been found to be impossible to even attenuate the bacilli, or to arrest the degenerative or destructive processes by any agent administered either internally or indermically.

The process of preparing and administering agents in the form of an impacted nebula by the dilator offers the sole means by which recovery is possible. The collapsed, stenosized or occluded bronchia and air cells being expanded, and the obstruction removed, the air through respiration comes in contact with all surfaces. The excessive heat and moisture are absorbed by physiologic evaporation. The bacilli being first sterilized through attenuation, are finally exterminated by the germicide which is conveyed and deposited by the impacted nebula.

The benefit of forced dilatation in the improvement of the general health, is as evident and satisfactory as its mechanical and therapeutic effects are locally. More air being breathed after forced dilatation, it is thus through increased oxidation that the processes of nutrition and assimilation are improved and degenerative and destructive processes arrested. Through increased oxygenation (aeration) of the blood, constructive molecules are organized and energy is stowed, to be expended in maintaining organic and functional activity. Notwithstanding the apparent simplicity of the apparatus and process, there is sufficient scope for the employment of the most profound medical knowledge and dextrous skill in the selection, preparation and administration of the medicaments to be employed in the treatment of the various forms and stages of diseases of the air passages.

In the selection of an antiseptic germicide to be administered in the forms of an impacted nebula, preference should be given to the following. First to the chlorides: of gold; of mercury; of iron (especially in hematorrhea); of ammonium. Second, to iodin and the iodids: bin-iodid of mercury being especially valuable; and to the sulphides or sulphates. No unfavorable physiologic effects follow their use. The menstrum for each should be alcohol and glycerin equal parts, using as little water as possible to dissolve the salts.

The volatile aromatics, in gums, crystals or essential or ethereal oils: as thymol, eucalyptol, pine needles, cubebs, tar, creosote, carbolic acid, camphor, menthol, etc., are of known value, when selected and used singly or in combination in the treatment of the air passages generally. In my practice I prefer and use those prepared by the Ozone Company of New York and Chicago, as their oils contain a large per cent. of ozone. If the secretion be excessive, alcohol and glycerin should be used as a menstrum. If the membranes are dry from scanty secretion, a neutral vegetable oil is preferable, as therapol which contains 10 volumes per cent. of ozone as prepared by the same company. All menstrums used in preparing solutions to be administered into the lungs and tympanic cavities especially, should be an ingredient that will speedily evaporate or else be readily absorbed by the tissue. That elegant, odorless, tasteless and neutral carbon oil known as abolin, glymole and a score of other names, should never be used as a solvent menstrum for medicaments to be administered into any of the air passages, especially not into the tympanic cavities or the lungs. The tissue will not absorb the oil and on account of greater affinity the oil retards the absorption of the medicament by the tissue.

The most serious objection to the use of the oil is the fact that the entire surfaces throughout the air passages become coated over with it. The oil will not evaporate and the tissue will not absorb it, while at the same time it prevents physiologic evaporation by excluding the air from the mucous surfaces. Thus by its peculiar behavior, it tends to arrest the processes of osmose to a greater or less degree, which results in sub-oxidation.

Its only legitimate place in medicine is as an application to denuded, cauterized, lacerated or acutely inflamed surfaces. For the reason that its peculiar properties, as above described, makes it an agent well adapted to protect such surfaces from the air, thus preventing evaporation, oxidation and incrustation. These same properties will gradually exclude it from the prescriptions of physicians, just as the use of cosmolin or vaselin has been discontinued except in those cases to which it is adapted.

While I shall take pleasure in answering questions and giving any additional information or instruction that I can to physicians who choose to inquire, either in person or by letter, regarding the professional use of the process and apparatus, I wish it understood that I can not give any further information relating to the manufacture or sale of the same, other than to say that both my standard and hand dilators were made by the Owens Brass and Copper Works, of Chicago.

Columbus Memorial Building.

ORIGINAL INVESTIGATIONS ON THE NATURAL HISTORY, (SYMPTOMS AND PATHOLOGY) OF YELLOW FEVER. 1854–1894.

BY JOSEPH JONES, M.D., LL.D.
NEW ORLEANS, LA.

(*Concluded from page 721.*)

CHAPTER XI.

EFFECTS OF PUTRID MATTERS ON THE BLOOD.

M. Gaspard appears to have been one of the first experimenters with putrid matters. On June 19, 1809, he injected into the jugular vein of a small bitch, half an ounce of fetid liquid, arising from the simultaneous putrefaction of beef meat and dog's blood. On the instant the animal made many movements of deglutition, and very soon afterward experienced dyspnea, *malaise* and depression. She lay on her side refusing all food, and soon voided first her excrements, then her urine. In an hour's time, prostration of strength, gelatinous and bloody alvine discharges often repeated, dysentery, redness of conjunctiva; afterward, chest painful, belly hard and painful when touched; gradual extinction of strength; bilious, gelatinous and bloody vomitings. Death three hours after injection. On opening the body, yet warm, the lungs were engorged with blood and of a violet or blackish hue, with many ecchymosed or petechial spots, which likewise existed in the left ventricle of the heart, in the spleen, mesenteric glands, gall bladder, and even in the subcutaneous cellular tissue. The peritoneum contained some spoonfuls of a reddish serosity, but the mucous membrane of the alimentary canal was most affected. That of the stomach was slightly inflamed; that of the intestines, above all—the color livid, with black points, and covered with a gelatinous and bloody substance, resembling the lees of wine or the washings of flesh. In addition, this inflammation was accompanied with a slight thickening of the tissues, and possessed a hemorrhagic or scorbutic appearance.

On July 14, 1821, Gaspard injected into the right jugular of a large dog, two ounces and a half of a fetid liquid that had arisen from the fermentation for two days of cabbage leaves, at a temperature of 20 degrees R. It was thick, not at all acid and was mixed with an equal quantity of water. While injecting the animal often swallowed, and before long began vomiting, which was frequently repeated, and soon fell into a state of depression. Some hours afterward, great general uneasiness, pain in chest on pressure, respiration embarrassed, difficult and plaintive, appearance of peripneumonia, then vomiting anew and great depression all day. At the expiration of nine hours he had in the night a very fetid liquid stool, black as soot, analogous to the evacuations in melæna, and formed of a little excrement and mucus, with a great deal of apparently putrid blood. Some time afterward the dog had another stool, but it was merely muco-sanguineous. On July 15 (second day) depression more considerable, adynamia, recumbent on the side, vascillating walk, pulse small and febrile, ardent and seeming inextinguishable thirst, urine natural and abundant, respirations few and weak. During the day the pulsations of the heart would return at intervals with an extraordinary strength and noise, resembling what occurs in the highest degree of aneurysm, combined with hypertrophy of the organ. July 16, less depression, cessation of the disordered action of the heart, but still ardent thirst, refusal of food; fever and sometimes vomiting of drink. July 17, same condition. July 18, symptoms aggravated, extreme debility, walk tottering, excessive thirst, eyes red, inflamed and blear, nostrils swollen and filled with mucus obstructing the passage of air, mucous membrane of the mouth violet red and phlogosed. At mid-day, liquid stool of a whitish-gray color, mixed with grumous blood, of a purulent character and odor. Death during the night at the termination of the fifth day of the experiment.

Before opening the body, the skin, subcutaneous cellular tissue and muscles presented the same appearance as after death from asphyxia from want of air, and did not appear exempt from inflammation. Conjunctiva, pituitary and buccal membranes red or violet, and covered with a thick abundant mucus, lungs of a gluey feel, slightly phlogosed in some spots, but crepitant enough. The left ventricle of the heart presented many brown spots or sort of ecchymoses, penetrating even into the tissues; it was, besides, of the color of the lees of wine which contrasted singularly with the natural color which the right ventricle preserved.

The right ventricle was in part filled up with a hard albumino-fibrous concretion, with a yellowish-white hue like fat, very homogeneous, undistinguishable from the molecules of the injected liquid, weighing two and one-half grams, almost entirely free, and only adhering to the ventricle by a small attachment. This concretion with ramifications of the same color and consistency, extended into the pulmonary artery, and into the superior vena cava, and also into the azygos, axillary, and even to the right jugular. Probably it had been the cause of the violent pulsation of the heart. The esophagus and stomach were apparently healthy, but the mucous membrane of the intestines, and particularly of the duodenum, rectum, and a small portion of the small intestines was of a violet-red, colored chiefly in longitudinal wrinkles and irregular patches, which gave a parti-color to the outside of the intestines before they were cut open. Otherwise this inflammation was without thickening of the tissues, without ulcerations and much resembled ecchymoses or hemorrhage. In the duodenum were observed many kinds of open blisters, whence a large quantity of sanious blood was made to flow by pressure on the neighboring mesenteric vein. The internal membrane of the rectum was still more affected, and its mucous glands were very swollen and distinct. The intestine contained puriform matters, resembling those of the last evacuation. The other intestines contained mucus matter of a whitish-gray color, and very thick. The mesenteric glands appeared as if penetrated by blood and altogether inflamed. The gall-bladder, stained exteriorly by brown and violet spots, was filled with a black thick bile, as ropy as melted glue.

Gaspard also performed other experiments with putrid liquids, with similar results; and he demonstrated for the first time, that putrid liquids injected into the cavity of the pleura, etc., produced the same effect as injections into the veins (*Journal de Physiologie*, tome 2).

M. Magendie, fully appreciating the important facts that since medicine has existed, the pernicious influences of ponds, marshes, neglected harbors, and in

general, all places, in which animal or vegetable matters were undergoing putrefaction, are recognized; and that men and frequently animals, inhabiting the neighborhood of these infected foci, were subject to serious maladies, which authors have designated under different names, such as the plague, intermittent fever, malignant fever, dysentery, cholera morbus, typhus, yellow fever, etc.; repeated with the greatest care the experiments of M. Gaspard, with an eye to their application to medicine, and the elucidation by the experimental method of the manner in which putrid animal or vegetable matters act upon the healthy individual. Magendie affirmed that the results of M. Gaspard were perfectly exact; and in addition he observed that different kinds of flesh have not the same activity in their putrefaction. The muscles of herbivorous mammalia appear less active than those of the carnivora. Putrefied oyster water did not cause very violent effects; but the deleterious matter *par excellence*, is putrid fish water; some drops of this water injected into the veins producing in less than an hour, symptoms which have the greatest analogy with those of typhus and yellow fever. Death usually ensued in twenty-four hours, and upon opening the body all the traces of a chemic alteration of the blood were discovered. The blood remained for the most part fluid; it had transuded through the walls of the vessels into the different tissues—particularly was it found to have traversed the intestinal mucous membrane. Blood as well as mucus accumulated in the stomach and intestines, where it presented all the intermediate hues between bright red and deep black.

Such experiments seemed to sustain the view that the healthy state of the blood in which its tendency to coagulation is very strong, prevents the transudation of the liquid through the walls of the smaller vessels. Magendie established that the same putrid matter, so deleterious when injected into the veins, has no bad effect when introduced, even in a strong dose, into the stomach or large intestines of animals; and that when putrid liquids were filtered, the animal which received the filtered liquid into its veins, experienced much less intense and much more prolonged pain than that which received the unfiltered liquid. An equal quantity of the same putrid water injected into the veins, or introduced with suitable precautions, into the divisions of the bronchia, do not produce the same effects. Injections into the lungs produce less serious consequences than injections into the veins. Magendie also subjected animals to the effluvia of putrefying vegetable and animal substances; and he thus sums up the results of these and the preceding experiments:

"From the preceding facts, it is seen that putrefied liquids when they are injected into the veins cause death, or effects which have the greatest analogy with those of yellow fever and typhus; that the prolonged respiration of putrid miasms produces death also, but in a period much longer and with symptoms which differ from the diseases I have just named. What can be the cause of such difference of the mode of action in the same substances? Why this diversity in their deleterious properties? It would be so much the more important to be able to answer these questions, as therein lies the whole difficulty, relative to the epidemic diseases which have recently occupied the public mind."

Among the conjectures which may be offered, there is one which merits particular attention. We may presume that different atmospheric conditions, and particularly temperature and moisture, ought to have a great influence upon the mode of action of putrid miasms. (*Journal de Physiologie*, tome 3; "Speculations on the Cause of Yellow Fever," by John Harrison, M.D., Professor of Physiology and Pathology in the Medical College of Louisiana, New Orleans; *Medical and Surgical Journal*, March, 1817, vol. III, No. v, pp. 568–573.) The results obtained by MM. Leuret and Hament (*Journal des Progrès des Sciences Médicales*, 1827, vol. v, pp. 1, 181), were similar to those of Gaspard and Magendie.

The more recent experiments of Dr. Andreas Högzes, of the University of Pesth, performed during the epidemic of cholera in that city in 1873, are of interest in connection with the present discussion of the effects of putrid and morbid matters on the blood.

Dr. Högzes endeavored to solve the following questions:

1. Are fresh choleraic discharges capable of exerting a deleterious influence on the organism, and in what form?

2. Does gastric and intestinal catarrh, artificially produced, increase the liability to be affected by choleraic discharges?

3. Is the air capable of carrying with it particles or choleraic evacuations, which act injuriously on the organism; and if this be the case, is there a difference between non-disinfected and disinfected discharges, simple diarrheal dejections and putrid fluids?

4. Are choleraic evacuations, when freed from elementary organisms, capable of affecting animals?

5. What parts of disinfected and of non-disinfected choleraic discharges, does a current of air carry with it? What is the further fate of these elementary forms, if they fall on a soil favorable to their development, or on one that is neutral? In what way do they modify the action of the medium?

In his experiments, Dr. Högzes used choleraic evacuations that had been discharged an hour, or an hour and a half. The animals operated on were dogs and rabbits.

Six dogs of middle size were the subjects of experiments bearing on the first and second questions. In three, catarrh of the stomach and intestines was induced by the administration of the sulphate of copper and the subcutaneous injection of a few doses of croton oil; the other three were allowed to remain healthy. As soon as the vomiting and diarrhea had ceased in the first three dogs, Dr. Högzes administered to each of two dogs (one healthy and one diseased), fresh urine, intestinal evacuations, and vomited matters, from choleraic patients. Both dogs had intestinal catarrh (frequent vomiting and diarrhea). The dog with the sound intestinal canal was well on the third or fourth day; while one of those in which gastro-intestinal catarrh had been induced, died on the second day, having had constant vomiting and fluid evacuations; and the other two were not convalescent until the fifth or sixth day, and remained weak some time afterward.

To obtain an answer to the third question, Dr. Högzes kept rabbits exposed for some time to currents of air charged, 1, with non-disinfected; 2, with disinfected choleraic evacuations; 3, with ordinary diarrheal stools; 4, with the fluid of putrid meat. The oxygen necessary for respiration was

supplied in abundance. The rabbit in each case was confined in a glass bell jar, placed in a well ventilated apartment; the bottom of this jar was airtight, and the air, charged with the evacuations or with the putrid fluid, passed in by one aperture at the top, and escaped by another. The air having been first made to pass through the fluid of which the effect was to be tested, was forced into the jar by a Bunsen's water apparatus, at the rate of 15 liters per minute. To prevent the air from escaping in its foul state through the ventilating tube, it was made to pass through cotton wool and sulphuric acid, and in this way it was possible, without danger of injuring the health of the operator to continue the experiment for any time.

Two rabbits in one of which bronchial catarrh had been induced by the inhalation of ammonia, were subjected for twenty-four hours to a stream of air charged with non-disinfected choleraic evacuation. While under the bell the animals had slight catarrh, did not eat and were depressed. In the third twenty-four hours, violent diarrhea set in, and both animals soon became cold and collapsed; the one in which bronchial catarrh had been induced, died first, and the other five hours afterward—both presenting the same symptoms. A small rabbit exposed for twenty-four hours in the same apparatus to air charged with choleraic discharges disinfected by carbolic acid, remained healthy. Another animal of similar size was kept without injury for twenty-four hours in a current of air saturated with ordinary diarrheal evacuations. A large rabbit, exposed for twenty-four hours to a stream of air, saturated with the fluid of meat that had been decomposing during five weeks, at first lay stupefied at the bottom of the apparatus, but immediately afterward rose up, and escaped without injury.

The experiments bearing on the fourth question consisted in the injection into the jugular veins of dogs and guinea pigs, in one case of choleraic discharges containing microscopic organisms, and in the other cases of the same discharges after filtration. With regard to the last question, Dr. Högzes conducted through fresh non-disinfected choleraic discharges a slow stream of previously purified air. The elementary forms brought over with the air current were received into two media—one neutral, distilled water; and one suitable for their development, Cohn's fluid. The fluids were drawn off by drops from the vessels, and examined with the microscope. Both distilled water and Cohn's fluid have no action when injected into the vessels; and the question was, whether their action would be changed by a certain amount of saturation. In a short time, a large number of elementary forms (chiefly bacteria), with which the cholera excreta were saturated, were carried over into the fluid, and in twelve hours produced a milky cloudiness in Cohn's solution. At the end of the second twenty-four hours the surface of Cohn's fluid was covered with a bluish-green shiny layer of cryptogamic matter, 2 centimeters thick, and the fluid itself assumed a peculiar smell, reminding one of decomposing fruit. The distilled water which remained quite clear, although charged with organisms, and the Cohn's fluid were injected into the veins of dogs and rabbits. The result was, that both the distilled water and Cohn's fluid produced the same symptoms as the choleraic discharges when injected into the venous system—acute gastro-intestinal catarrh, and in some of the rabbits death.

Similar researches with discharges disinfected by carbolic acid showed that the power of development in the elementary organisms was destroyed; the Cohn's fluid still remained clear at the end of twenty-four hours. On injecting the fluids into which the air had been conveyed through the disinfected excreta, the symptoms of poisoning with carbolic acid were produced; this is readily explained, when it is remembered that the current of air in the course of twenty-four hours must have carried with it a large amount of carbolic acid.

While these experiments were being carried on, the attendant, who had been exposed for some time to the emanations from the vessels containing the choleraic excreta, had a severe attack of gastro-intestinal catarrh, which recurred twice within a short period. His little daughter, who slept with him, had vomiting and diarrhea the day after he became ill. Five days after his illness, two cases of cholera (one of which ended in death) occurred in the house in which he resided, which had hitherto been free from the disease. During the microscopic examination of the choleraic discharges, Dr. Högzes had loss of appetite, a coated tongue, and a constant sensation of oppression in the epigastrium; after the researches were completed, these uncomfortable feelings disappeared.

The following are the conclusions at which Dr. Högzes has arrived:

1. Fresh choleraic discharges exert an injurious influence on animal organisms, as it seems in different degrees in different animals.

2. The principal or infallible evidence of injury after the introduction of choleraic discharges in any way, is more or less inflammation of the stomach and intestines.

3. An artificially induced gastro-intestinal catarrh renders animals more or less liable to be thus affected.

4. The same symptoms may be produced by the inspiration of a stream of air charged with particles from non-disinfected choleraic discharges, as well as by immediate action on the stomach, intestines, or venous system; while the particles in choleraic discharges disinfected by carbolic acid, appear to be quite harmless.

5. A current of air, passing through non-disinfected choleraic excretions, carries with it cryptogamic elements, which vegetate abundantly in a favorable soil; while the same growths from discharges that have been disinfected by carbolic acid are incapable of multiplication.

6. Choleraic discharges freed from organized elements are capable, by reason of their chemic composition, of producing the same pathologic changes as they do when they contain the organized forms.[51]

The last conclusion established by the experiments of Dr. Andreas Högzes, is of importance in establishing the fact that the propagation of cholera does not depend on the organized elements. It may, however, at the same time be true that the fungi developed and propagated in the choleraic discharges, may become the vehicles or carriers of the poison of cholera. We have regarded the fungi found in the black vomit and other fluids of yellow fever, as in no respect the cause of the disease, but at the same time it may be regarded as probable that when developed in the poisonous matter of yellow fever they may become agents for its dissemination.

[51] Centralblatt für die Malarinischen Wissinschaften, Nov. 1 and 8, 1873.

I have shown by a series of experiments[52] on the action of the poison of the American copperhead and of the American rattlesnake on living animals:

1. The primary and chief action of the poison of the American copperhead (*Trigenocephalus centertrix*) is upon the blood.

2. The poison of the copperhead is directly destructive to the colored corpuscles of the blood, altering their physical and chemical properties and relations, and rendering them unfit for the performance of their important offices in circulation, respiration and nutrition.

3. The poison of the copperhead appears to have an affinity more especially for the coloring matter of the colored blood corpuscles.

4. Under the action of the poison of the copperhead, the animal temperature is but slightly increased notwithstanding the profound changes inaugurated in the blood; and after the establishment and propagation of the pathologic changes the temperature descends.

5. The action of the heart is increased in frequency and diminished in force under the influence of the poison of the *Trigenocephalus centertrix*.

6. The profound alterations induced in the constitution of the blood by the poison of the American copperhead, give rise to passive hemorrhages into the cellular structures, and from the intestinal mucous membrane. This phenomenon recalls strongly the passive hemorrhages in certain febrile diseases, and especially yellow fever. Such experiments indicate that the black vomit of yellow fever is the result of the action of an irritant poison upon the blood, and gastric mucous membrane. We have also in these experiments an explanation of the mode in which dysentery might be induced by a poison introduced into the blood.

7. The poison of the rattlesnake (*Crotalus durissus*) acts as a local irritant upon the capillaries, and as a destructive agent in the blood and muscular structures, causing congestions and bloody effusions, and softening and disorganizing action of the muscular fibers.

8. The poison of the rattlesnake destroys by its direct effects upon the cerebro-spinal centers, and by its depressing effects upon the sympathetic ganglia, and muscular structures of the heart; and also by the changes which it induces in the composition of the blood.

If therefore a few drops of a secretion elaborated by special organs in living animals in a normal state be capable of producing profound disturbances in the blood and nerves and muscular systems; it can not be unphilosophical to refer the origin of certain diseases, as typhus fever and yellow fever, to the action of special poisons arising in the human body when subjected to certain conditions of food, climate, moisture and the foul air arising from overcrowding.

Another striking fact is that a deadly volatile poison may be generated during the fermentation or chemical and physical changes of certain vegetable constituents. Thus by a series of experiments[53] we have shown that the volatile poison hydrocyanic acid (prussic acid) induces profound alterations in the blood, and through this medium affects all the organs and tissues. We have endeavored to open the vast field of the action of well-known poisons, in order to elucidate the nature of the unknown febrile poisons.[54]

It is surely worthy of note that the most destructive vegetable product is the direct result of fermentation and is volatile.

Such facts may be plausibly adduced to show that a deleterious agent capable of producing yellow fever might be the product of animal and vegetable matters under different ranges of temperature. The conjecture has been hazarded that the poison of this disease resembles a volatile essential oil and which in conjunction with the albumin and ammonia of the atmosphere induces the phenomenon of yellow fever. They may also be adduced to sustain the hypothesis that the poison may be engendered in the human system under certain circumstances, and may be propagated through the medium of the atmosphere and by the agency of fungi and animalculæ.

THE END.

[52] British Medical Journal, Dec. 13, 1873, p. 697-698. Medical and Surgical Memoirs, Vol. I, pp. 519-529.

[53] Medical and Surgical Memoirs, vol. I, pp. 279-330.

[54] Et seq. Medical and Surgical Memoirs, vol. I, pp. 272-532.

PRE-COLUMBIAN LEPROSY.

BY ALBERT S. ASHMEAD, M.D.
LATE FOREIGN MEDICAL DIRECTOR, TOKIO HOSPITAL, JAPAN.
NEW YORK.

(*Continued from page 723.*)

Mr. Saville tells me that in the pottery of ancient Mexico there are symbolic pictures of death; human faces with blinded eyes. It is at least his opinion that this extinction of the eyes means death; for the god of death of these peoples is always represented with a stick puncturing the eyes. But nothing that can be considered as disease representations has ever been found there.

In Chiapas, Mexico, he says images have been recently found showing clubbed feet, arms in cramped positions, etc. This find is believed by archæologists to be exceedingly valuable, but it has not been, as yet, much reported upon.

If leprosy existed in America in pre-Columbian times, and if these deformations on *huacos* pottery are intended to represent lepers, the same idea must have been conceived previously in Japan, or Eastern Asia in general, from whence the disease itself would be likely to have come. But Prof. Edward S. Morse writes me: "The pre-historic pottery of Japan has no trace of lepers either incised, in relief, or painted. Nor do the forms ever represent a natural object. In early historic times, say from 1200 to 1500 years ago, a soft reddish pottery hand-made, and a hard gray pottery, turned but not glazed, in very rare cases, showed the form of natural objects."

Mr. Tanaka, a Japanese importer, who is probably as conversant with modern Japanese pottery and art as any man living, affirms that he never saw the representation of a leper, either in pottery or in the drawings of Japan.* The blind man is represented; he is, in fact, considered as possessed of virtues and

*NOTE.—In the "Japanese Manual for Ladies," a book on etiquette published in the eighteenth century, there is a drawing of the Empress Gemmyo (A. D. 708-721) who washed a thousand lepers with her own hands and took general care of them. (She built the first leper hospital in Japan.) In this picture a tuberculated leper is represented. He has the leonine face, without, however, loss of nose. In a Japanese book called "Hakkenden," which means "Story of Eight Warriors," written early in this century, there is a representation of a leprous beggar. He is without a nose and without half; his red face is hypertrophied and tuberculated. His upper lip is represented much swollen and tuberculated. His toes are gone, the hands show scabs and tubercles. These are the only representations of leprosy known in Japan. I may say that the loss of nose and upper lip in Japan is frequently observed in the streets. This deformation in Japan, which is a leprous country (there are 100,000 lepers in Japan) is considered always as syphilitic.

powers refused to the crowd of men with regular eyes; he is the massager and acupuncturer.

Under the reign of the Empress Suinin (A. D. 29-70) the custom prevailed of burying living retainers around the body of their masters. The living beings were replaced by small images of clay, and that new custom continued until 700 A. D. In 700, cremation began; it was first practiced by a Buddhist priest. When the custom of cremation extended, the burial of retainers, or of clay images, had no longer any significance in the mind of these primitive peoples. These accompaniments were intended for a body, not for a heap of ashes. Cremation was, in Japan at least a Buddhistic, a religious institution. It was not intended and especially used for the destruction of leprous cadavers. Even now lepers are excluded from the burial rites of cremation. It is probable that even in our day there is more cremation than interment in Japan; but lepers are severely excluded from the former. We might very plausibly conclude, I think, that if leprosy came to this country from East Asia, the absence of skeletons with leprous indications is very significant; for, as I have just said, leprous bodies were not cremated, and therefore ought to be found occasionally. Even if these bodies had been as a rule cremated, would not some of them, or parts of them have escaped the incineration? If we can not find any trace of the mutilations peculiar to leprosy, we may safely conclude that leprosy did not exist at all here.

Dr. Brinton and Professor Powell assert that the civilization of America is autochthonous; that is, it did not come from East Asia, or from any other country. Let us now ask ourselves here what autochthony after all means? Can it mean, according to etymology, anything else but the origination out of certain ground, certain environments, and certain circumstances of certain conditions of life? There must be evidently diseases which originate in circumstances which are only found in the place where they originate; and these I should call autochthonous. What is, after all, the meaning of autochthony, speaking of diseases? It is natural to suppose that in every human body there are all the possibilities necessary to produce any disease. Call them germs, or what you will. Suppose that an individual in the city of New York finds himself and his possibilities placed by chance in such a condition that a disease, up to his time unknown, develops in him and that, in some manner, it is transmitted. Well, the disease would be autochthonous in New York, as yellow fever probably was in Yucatan. Now it is extremely reasonable to believe that at the same time, or at some other time, before or after, the same phenomena had occurred in many other places. If we consider this, to what does the autochthony of disease come?

Is leprosy autochthonous wherever we find it, or must we suppose that it comes in every case from inoculation?

If leprosy existed in America before Columbus, if not autochthonous, it must have come from East Asia, or indirectly from its ancient home in Africa, or else these countries were inoculated from America. I believe that the lepræ bacillus requires its own soil to thrive upon and that most individuals would resist its development as well as other disease germs are resisted. I, for my part, do not believe that the lepræ bacillus is the real factor in the production of leprosy, or that a bacillus is the real cause of disease. I believe that there is a cause of the disease of which the bacillus is only a symptom. What the nature of that cause is I can not say, and nobody can say; modes of life, kind of food, peculiarities of climate, clothing, morals, etc. In all cases, where certain conditions belonging to these factors exist, it may be that the same kind of bacilli find their living; the microbes may have nothing to do with it, except that under these conditions alone they can live. Under certain conditions of life, certain bacilli take birth. It is not the bacillus that is the cause of the damage that ensues; it is the condition which allows it to prosper.

Professor Stillé says: "The supreme puzzle is the primary source of each specific germ. As yet no Darwin has arisen to show even the possibility of the evolution of such germs. To name them bacteria, and assign to each disease a specific bacterium, only removes the difficulty one stage backward."

If the ancient races of America came from East Asia it is reasonable to suppose that they came through Japan, Yesso, the Kurile Islands and Aleutian Islands. There are stone age, arrow head connections between Japan, Yesso, the Kurile and Aleutian Islands; there are syphilitic connections between Japan, Vancouver, Mississippi mound-builders and Mexico. There is no connection in pottery, or in modes of burial between these two civilizations. There is, however, a skull connection between the Indians of Mexico (Tarahumares), ancient Arizonians (Saladoans) and ancient Peruvians. From these facts we may suppose that there was a migration from East Asia to America.

There is no evidence from Behring's Strait down to South America, that any leprous inoculation took place through this migration. If any leprous inoculation into Peruvian populations took place, it must have been either through the Spaniards or, as Le Plongeon assumes, directly from India. It could not have come through the islands of Japan, that is preceding their occupation by the present Japanese race; for the Ainos, as long as history knows anything about them, never were afflicted with leprosy, and they are immune to-day.

We must therefore conclude that if leprosy came from India to America, it must have come by another route than that which brought syphilis.

(To be continued.)

A Second (1) Case of Ocular Diphtheria Treated by Sero-therapy By Dr. H. Coppez. (*Journ. de méd. et de chir. de Bruxelles*, November 24.) A detailed description is given of this case to emphasize the special character of the stage of repair following the injection of serum. The false membranes, says the author, disappear more or less rapidly and leave behind them healthy tissue. There is no period of suppuration or repair. The disease is cured at the outset. The disappearance of the false membranes takes place in inverse order to their appearance. "They seem to melt like a snowflake in a ray of sunlight," is the picturesque expression of Professor Coppez, or in more scientific terms, they seem to disappear by a process similar to that by which they came. It is superfluous to dwell longer on the important rôle played by sero-therapy in the treatment of occular diphtheria. Thanks to the injections of antitoxin, we are in a fair way to check the invading progress of pseudo-membranous exudates. Better still, the last two stages of the malady may be suppressed, with all the dangers that accompany them. In short, with this new treatment, when the false membrane has once disappeared the disease itself is conquered. If treatment is begun at the proper time it will not be forty-eight hours before all the menacing symptoms have disappeared, and the physician will be gratified by the rapid and complete recovery.—DASTOT, in *Annales D'Oculistique*, January, 1895.

ASSOCIATION NEWS.

AMERICAN MEDICAL ASSOCIATION.

OFFICIAL REPORT OF THE PROCEEDINGS IN GENERAL SESSION, 1895, OF THE FORTY-SIXTH ANNUAL MEETING, HELD IN BALTIMORE, MD., MAY 7, 8, 9, AND 10, 1895.

MAY 7—FIRST GENERAL SESSION.

The Association convened in the main auditorium of the new Music Hall, and was called to order at 10:30 A.M., by the President, Dr. Donald Maclean, of Detroit, Mich.

Prayer was offered by the Right Rev. William Paret, M.D., Bishop of Maryland.

The President invited all ex-Presidents and Vice-Presidents to seats on the platform, and among those who complied with the invitation were Drs. N. S. Davis of Chicago; Henry O. Marcy, of Boston; W. B. Rogers, of Memphis; Jas. F. Hibberd, of Indiana.

President Maclean then introduced the Hon. F. C. Latrobe, Mayor of Baltimore, who delivered the following

ADDRESS OF WELCOME.

Ladies and Gentlemen:—It is an agreeable duty, in fact, a great pleasure, for me to have the honor of extending to the members of the American Medical Association a sincere welcome to Baltimore. Although by profession a lawyer, no one has a greater or more profound respect for the sister profession of medicine than myself. Both of our callings are occasionally slandered; in fact, some have been bold and bad enough to call us necessary evils. I once knew an old lady who had never been sick, who said: "If I should be taken ill send first for my lawyer, then for my doctor, and when they get through with me, go right off for my preacher."

But we members of these learned professions have the proud satisfaction of knowing that among the men who have won honor in the land and who have added to the fame of our people none are more numerous than those who came from the ranks of medicine and law.

We have looked forward, ladies and gentlemen, for some time to the pleasure of your visit. We shall be glad to show you our hospitals, our asylums, our universities, our libraries and colleges, our monuments and our parks, and last, but not least, our city, whose people are ready and anxious to extend to our visitors a kindly and cordial greeting. We especially thank you, gentlemen, for bringing such a large number of ladies with you. Some one has said and, I think, with truth, that a man is always safer in traveling when accompanied by his wife.

If I was a doctor and a patient contemplating visiting another country or great city consulted me on the subject, I am sure I could give him no better prescription. Ladies, I extend to you a double welcome. Should any of our visitors desire to see the seat of the municipal government I offer you a sincere invitation to visit the City Hall. If the ladies will come, I hope they will bring the gentlemen with them.

In the name of this city and its people, I bid you all welcome to Baltimore.

MAYOR LATROBE was followed by Dr. Samuel C. Chew, who, on behalf of the Committee of Arrangements, welcomed the Association for the local profession.

DR. CHEW was warmly received on rising to speak. He spoke in part as follows:

Gentlemen of the American Medical Association:—The medical profession of Baltimore tenders to you a most cordial and fraternal greeting. Eight and twenty years have passed since this city was last honored by your presence here, and the changes which in that time have taken place in the Association, and in the world around us, are a measure of the changes—happily advances in knowledge—which have occurred in medical science. Since then a whole generation of physicians has largely passed away. Another generation has come into existence, so that of those active and strenuous workers in the profession who are here today many had then not entered it, and some no doubt were unborn.

The old order has changed and yielded place to the new; and, if such difference exists in our Association, how different, too, were our surroundings at that time. In 1866 the population of the United States was 35,000,000; now it is nearly if not quite, 70,000,000. Baltimore when you were last gathered here, was a city of about 250,000 souls, and now she numbers 500,000. But a more important change in its interest to our profession than mere increase of population is found in the fact that this city has become one of the chief centers of medical education in the country, and as such attracts here about one thousand medical students every year.

Again, at your former meeting here the swell of the storm of civil conflict had not yet wholly subsided; some of its sad results were in many places still manifest and flagrant, and among them was the retardation of medical progress. For, if in the midst of arms the laws are silent, so too, the voice of science is hushed or lowered. Peace is the atmosphere in which she flourishes and achieves her greatest triumphs.

DR. WILLIAM OSLER then reported on behalf of the Committee of Arrangements, and offered the program as the entire work of the meeting. He also announced the following receptions and entertainments:

TUESDAY, MAY 7.

1. Section Dinners.
2. Reception at Dr. Robert W. Johnson's.
3. Reception at Dr. Howard A. Kelly's.
4. Reception by Dr. Julian J. Chisolm.

WEDNESDAY, MAY 8.

Hospitals open for inspection: University of Maryland, Baltimore Medical College, College of Physicians and Surgeons, Baltimore University. Reception at Johns Hopkins Hospital, 8 to 10 P.M.

THURSDAY, MAY 9.

Fête Champêtre at Sheppard Asylum, 5 to 7 P.M. Reception at New Music Hall, 9 to 12 P.M.

The following Clubs offered their privileges to the members of the Association during their stay in Baltimore: Atheneum Club, University Club, and Catholic Club. To the ladies, "The Arundel Club."

PRESIDENT MACLEAN then delivered his ADDRESS, which was punctuated throughout its delivery with applause.

DR. J. MILTON DUFF, Pittsburg—I move that the thanks of the Association be tendered to the President for his able address, and that it be referred to the Committee on Publication.

Seconded and carried.

DR. A. L. GIHON, Washington, D. C.—I move that that part of the President's Address which pertains to a Bureau of Public Health be referred to the authorities at Washington who are engaged in establishing such a bureau. Seconded.

DR. QUIMBY, New Jersey—In order to make the matter a little more effective, I move, as an amendment, that the portion of the President's Address alluded to be referred to a committee of three, with Dr. Gihon as Chairman, to present it to the authorities at Washington. Seconded.

DR. GIHON—I differ with Dr. Quimby. I do not think the authority of three men would be greater, and I am satisfied to let it go as coming from the President of this Association alone, and in his own words.

DR. QUIMBY withdrew his amendment.

THE PRESIDENT then put the original motion, which was carried.

The Permanent Secretary read a communication from the Judicial Council as follows: Decision of the Judicial Council of the American Medical Association in the case of the Medical Society of the State of Pennsylvania, versus the Trustees of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

"Having examined the testimony brought before it, the Judicial Council of the American Medical Association find some objectionable advertisements have inadvertently appeared in the JOURNAL of the Association and have given the Board of Trustees and Editor of the JOURNAL official notification of the fact.

Signed, H. BROWN, President, *pro tem.*

Attest, JOHN B. ROBERTS, Secretary."

DR. FERGUSON asked if the communication was open for discussion, to which the President replied in the negative, and decided that this action was final.

DR. SOLIS-COHEN, of Philadelphia, offered the following:

Resolved, That the report of the Board of Trustees be made the special order for to-morrow, Wednesday, immediately after the report of the Committee of Arrangements, and that it then be referred without discussion to a special committee of three, who shall report on Thursday morning in the place now assigned to the report of the Trustees. Seconded.

DR. E. F. INGALS, of Chicago—I have no objection to that resolution, except this, that the report will not be ready to be made to-morrow.

DR. SOLIS-COHEN—I have introduced that resolution at the request of a number of members of the Association, not only in Pennsylvania but in various sections of the Union. They consider that the conduct of the JOURNAL of the Association is one of the most important subjects which can come before this meeting. They wish it discussed calmly, deliberately, at a certain time, and with accurate data before them.

DR. JOHN B. HAMILTON, of Chicago—Mr. President, I rise to a point of order.

THE PRESIDENT—Please state your point of order.

DR. HAMILTON—The gentleman is not speaking to the question, but is discussing the action of the Board.

DR. SOLIS-COHEN—I am speaking to the resolution. The object of this committee is to digest the report, to consider the criticisms that have been offered publicly, and to further consider what the Trustees have to say in relation thereto calmly, deliberately, without prejudice, and then report to the Association at a time when it can again be calmly discussed by the Association with all the necessary data before it. It is to prevent hasty judgment, favorable or unfavorable, that this resolution is offered. It is offered as a means of peace, as a means of carrying out the will of the Association, as a means of elevating the JOURNAL of the Association to the proud position that it ought to occupy as the leader and not the follower of the medical press of the United States. (Applause.) Therefore we ask that this resolution be adopted.

DR. GRAHAM, of Chicago, also stated, as a member of the Board of Trustees, that the Board would not be able to report at the time mentioned.

DR. J. COCHRAN, of Alabama—I move that the resolution which has been presented be laid upon the table. Seconded.

DR. HAMILTON—I rise to a point of order. The Board of Trustees being a standing Board, authorized by the Constitution of the Association, its report can not be referred to a special committee, except by unanimous consent.

THE PRESIDENT—The point is well taken.

DR. FERGUSON, of Troy, N. Y.—I rise to a question of information. I understand that the resolution offered by Dr. Cohen does not call for a reading of the report of the Board of Trustees, but that it is to be presented to a committee, and then the whole matter goes over, so that the action of the committee can be simultaneous with the actual reading of the report. It is well for the Association to understand this. If there is to be a committee appointed, and that committee is to act upon the report, it is as well that it should be appointed, so that during the preparation of the report they may be taken into the meeting of the Board of Trustees, and then we shall not have to wait until the eleventh or twelfth hour for their action.

THE PRESIDENT then put the motion to table Dr. Cohen's resolution, which was carried.

DR. E. F. INGALS—In order that every member may be satisfied, I would move that a committee be appointed at this time to consult with the Board of Trustees and to make such suggestions as they deem necessary, if there are no objections.

DR. COHEN—That is perfectly satisfactory to us, and I therefore second the motion.

DR. COCHRAN—I desire to say a few words with regard to the resolution. To my mind this is a very important question. It is a proposition to appoint a committee to sit in judgment upon our Board of Trustees. It would seem as if you can not trust the Board; that the Board of Trustees are a lot of bad boys; that they are not fit for the positions they occupy; that therefore you want to appoint a committee to make them behave themselves. I feel that this is dishonoring to the Board of Trustees. (Applause.) If I were a member of the Board and such a resolution was passed, I would immediately resign. It is all child's play to be appointing masters over them. Who is this Board of Trustees? I am going to read the names of men you all know. They are men you respect; they are men who have the confidence of this Association and of the medical profession, as well as of the people of this country. They are not school boys; they are not fellows with shady characters, but men of great reputation. One of them is Alonzo Garcelon. Another is Perry H. Millard. (Applause.) Another is J. W. Graham. (Applause.) Others are E. E. Montgomery, E. Fletcher Ingals, John E. Woodbridge, J. T. Priestley, Joseph Eastman, and David W. Graham. (Loud applause.) Now, you ask to have a committee appointed to supervise the work of these men. I say it is dishonoring to them, and they ought not to submit to it, and as an Association we ought not to put this indignity upon them. I believe in being virtuous; I believe in the ten commandments, in the Golden Rule, and all that, but there is such a thing as being too virtuous. (Laughter.) I want to say right here, that advertisements of the character that appear in the JOURNAL of the Association appear in every medical periodical that is published in the United States of America—every single one, I believe, certainly the majority of them. These periodicals are all conducted by honorable men, and they are at least a fair sample of the profession, and yet you want to make rules and impose regulations upon the JOURNAL that you do not require anybody else to submit to. (Applause.) There is another point with regard to the Board of Trustees that you might bear in mind, and it is this, that the American Medical Association is not a chartered body. It can not sue and be sued. The Board of Trustees are responsible for the expenses incurred in the publication of the JOURNAL. I have mentioned the names of the gentlemen composing the Board, and I hope this motion will be laid at rest by one vote. I therefore move, Mr. President, that it be laid upon the table. Seconded.

The reading of the resolution was called for, and it was read by the Secretary.

THE PRESIDENT put the motion to table and declared it carried, when Dr. Cohen rose and called for a division. There were 138 votes in favor of tabling the motion and 108 against it. The President then declared the motion carried.

The following was offered by Dr. P. H. Millard:

WHEREAS, Membership in the medical corps of the Navy of the United States from having been, through its high professional attainments, once eagerly sought by graduates of medical colleges, has ceased to be attractive to them, so that it is no longer possible to fill its vacancies; and

WHEREAS, It is believed that this is due to the inferior rank given to entrants to the corps and their assignment, when at sea, to quarters in the steerage, with undergraduates of the Naval Academy and civilian paymaster's clerks, while the young medical officer of the Army begins his career a grade higher and in the commissioned officers' mess; and

WHEREAS, The professional requirements and qualifications, the professional duties and obligations of the medical officers of the Army and Navy are identical; therefore be it

Resolved, That the attention of the Senate and House of Representatives of the United States be invited by the American Medical Association to this inequality, and that the Naval Committees of the two Houses be urged to inaugurate such legislation as shall confer upon the officers of the medical corps of the Navy the same status, pay and emoluments as are now accorded to the medical officers of the Army.

Resolved, That this resolution be printed and copies of it certified by the President and Secretary of the Association, shall be sent to the President of the United States, the Secretary of the Navy and to every member of the LIVth Congress.

DR. X. C. SCOTT, of Ohio—I move that the resolution be adopted as the sense of the Association. Seconded and carried.

The following was presented by the Business Committee:

"The Business Committee requests the Association to direct the officers of the Sections, at their afternoon sessions of Tuesday, to appoint members to serve as substitutes on the Business Committee in place of those who are absent during this meeting of the Association.

"The Business Committee also requests the Association to make this order such as will operate at all future meetings of the Association, or, if necessary, to amend the By-Law relating to the Business Committee to this effect."

DR. JOHN M. DUFF, of Pittsburg—I move that the request of the committee be granted. Seconded and carried.

A telegram was received from Dr. Rand, of Oregon, asking that the Section on Dermatology and so much of the work as pertains to genito-urinary diseases be consolidated.

DR. HENRY O. MARCY, of Boston—I move that this consolidation be made. Seconded and carried.

DR. LEARTUS CONNOR, of Detroit—In order to act intelligently on a definite, distinct and difficult matter, it is necessary to acquire certain information. The information we desire to obtain is this: What proportion of the members of the American Medical Association prescribe proprietary medicines, and what proportion do not? If we can settle this by collective investigations, then we shall know where we stand, and we can definitely understand what the Trustees ought to do in the matter of advertising. If the majority of the medical profession of this Association do not prescribe proprietary medicines at any time, then the Trustees ought not to admit any advertisements respecting them into the JOURNAL; but if they *do* prescribe them, then the majority ought to rule and the question be stopped. Therefore, I move that a committee of three be appointed who shall take means to ascertain during the coming year the proportion of members of the Association who prescribe proprietary medicines.

DR. A. L. GIHON—If such a committee is appointed, I hope Dr. Connor will be appointed its chairman. The resolution amounts to this, that one-third of us are either ethically

pure, or that two-thirds of us are practically empirics, whatever we may be theoretically.

DR. EDWARD JACKSON, of Philadelphia—If I rightly understand the matter, it is Dr. Connor's intention to settle the question which has been raised in the Association, and I would move, as an amendment, that we say "secret proprietary remedies." The question at issue is not with reference to proprietary remedies in general. Seconded.

DR. E. D. FERGUSON, of Troy—I do not think it is possible to poll the members of this Association to ascertain just exactly what their conduct is in that respect. There is a broad distinction here which has not been made by Dr. Connor. The fact that a new remedy has been discovered, and that some one outside of the profession has made it proprietary, is not by any means a logical or right interpretation of our Code of Ethics. The questions of proprietary and secret preparations are two very important ones, and we should keep clearly in mind as to whether we prescribe phenacetin, a simple, definite chemic compound, or antikamnia, which I have never done, nor have I prescribed a secret remedy of any kind. Inasmuch, therefore, as this resolution does not in my judgment carry with it a desire to get at the truth, but that it tends to create confusion; that it wishes to bring into the arena the discussion of points that do not properly belong here, I move that the whole thing be laid upon the table. Seconded and carried.

After the various State delegations had been instructed to meet immediately after the adjournment to select members of the Nominating Committee, the Association, on motion, adjourned until Wednesday, 10 A.M.

MAY 8—SECOND GENERAL SESSION.

THE PRESIDENT called the Association to order at 10:30 A.M.

The minutes of the preceding session were read and approved.

The Permanent Secretary read the following:

Upon the request of the Section of Materia Medica and Pharmacy, the General Business Committee has directed me to inform you that there are in attendance at the meeting of the Association, delegates from the American Pharmaceutical Association, with the request that you extend such courtesies to said delegation as you may deem proper.

Signed, L. D. BULKLEY, Secretary.

DR. HENRY D. HOLTON, of Vermont—I move that the delegates of the American Pharmaceutical Association be invited to take seats on the floor and given the courtesies of the Association. Carried.

DR. OSLER, for the Committee of Arrangements, announced several invitations.

The Permanent Secretary read the list of the Committee on Nominations, as reported from the several State delegations:

COMMITTEE ON NOMINATIONS.

Alabama, J. C. Legrange.	Missouri, I. N. Love.
Arkansas, L. P. Gibson.	Montana, G. W. King.
California, H. B. Ellis.	Nebraska, M. L. Hildreth.
Colorado, J. W. Graham.	New Jersey, I. N. Quimby.
Connecticut, W. S. Watson.	New York, E. D. Ferguson.
Delaware, R. G. Ellegood.	North Carolina, C. J. O'Hagan.
District of Columbia, C. H. A. Kleinschmidt.	Ohio, A. B. Walker.
Georgia, F. Westmoreland.	Oregon, H. R. Holmes.
Illinois, John B. Hamilton.	Pennsylvania, W. M. Welch.
Indiana, J. L. Thompson.	Rhode Island, W. R. White.
Iowa, J. T. Priestley.	South Carolina, T. J. McKie.
Kansas, M. B. Ward.	Tennessee, J. C. Reeve.
Kentucky, T. B. Satterwhite.	Texas, S. E. Hudson.
Maine, T. W. Foster.	Vermont, D. C. Hawley.
Massachusetts, A. H. Tuttle.	Wisconsin, W. H. Washburn.
Maryland, G. H. Rohé	U. S. Navy, T. C. Walton,
Michigan, D. Laferte.	U. S. Marine-Hospital Service,
Minnesota, P. H. Millard.	G. W. Stoner.

DR. GIHON, Chairman of the Rush Monument Committee, read his report, as follows:

REPORT OF CHAIRMAN OF RUSH MONUMENT COMMITTEE.

The committee to which has been intrusted the collection of a fund for the erection of a monument to the memory of Doctor Benjamin Rush, in the City of Washington, on the part of the members of the medical profession of this country, as an evidence of their appreciation of the eminent services of this distinguished patriot-physician of the Revolution, begs to report that this fund now amounts to $3,094.39, of which $3,000 are invested in bonds and mortgages bearing 5 per cent. annual interest. Your committee regretfully admits that this is but a sorry showing beside the success of the American Surgical Association in collecting all the funds they required for the erection of their projected statue to Dr. Samuel D. Gross, of Philadelphia, and can not but experience a sense of mortification that an association of such limited membership as he latter should have accomplished so much in so short a time, while the entire body of physicians in America, as represented by the American Medical Association, has done so little for this enterprise, upon which they entered with enthusiasm eleven years ago.

It is almost an ungracious reflection upon the intelligence of the members of this Association to repeat in detail the reasons why a statue should be erected to Benjamin Rush. The most eminent of the living members of our profession have eulogized him as *"the greatest physician this country has ever produced,"*—as *"the founder of scientific medicine in America"*—as *"one of the most notable men of his time, whose views were half a century ahead of the times."* The great medical authorities of Europe have given him unstinted praise as the American Fothergill, the American Sydenham, the American Hippocrates—best of all, as the American Rush, in "being unjust," says this eulogist, "to compare him with any other." Go to the Department of State at Washington and ask to see the Declaration of Independence, which converted thirteen British colonies into thirteen sovereign American States, and you will read the name of Benjamin Rush written upon it one hundred and nineteen years ago, that of the only practitioner of medicine who signed that immortal document, and for that act alone we, practitioners of medicine, ought to commemorate him by this monument. Or, read the proceedings of that convention which framed the Constitution that bound these thirteen sovereign American States into this United States of America, and again you will see the handwriting of Benjamin Rush, of Pennsylvania. The history of the United States records this man as one of the most active, fearless and pronounced of its rebel founders. In committees, in conventions, in the Continental Congress, to which he was elected when timid men fell out, Dr. Rush was conspicuously present and his eloquent voice was heard in a cause which meant the freedom of his country or his own death by the halter. In the early history of our profession in America the name of Rush is so linked with the warp of events that it is an ever prominent figure in the fabric. He was civilian practitioner, hospital physician and military surgeon; he was the standard authority among alienists, at home and abroad, down to our very day; he was an advanced sanitarian long before that was admitted to be a legitimate branch of medicine; he was a thoughtful epidemiologist in his youth, when other youths had not yet quit their rudiments. Eloquent as a lecturer, unrivaled as a teacher, prolific as a writer, a professor in that great school which he did so much to make great, he died, practicing his profession, at 68 from typhus pneumonia, while fearlessly encountering, studying and combating the frightful pestilence of 1813. Many of you have liberally contributed to monuments to generals, slain upon the battle-field, but was there ever a soldier who faced a deadlier foe than this, with greater courage than his, or died more bravely, honorably and gloriously than he died, trying to save other men's lives, instead of seeking their slaughter.

Where in the long line of our professional worthies can you find one more worthy of being portrayed to posterity as the representative physician of America? He studied medicine as thoroughly as it could be studied at that day, giving seven years to it after receiving his degree of Bachelor of Arts; he taught medicine to more than two thousand private pupils; he was a part of the social life of the community in which he was established, and by which he was regarded as a wise counselor, intrepid and undaunted in public assemblies during the critical birth-throes of the Republic, and as brave a soldier as ever honored the uniform he wore. Whether in his boyhood, his adult manhood, or his always virile old age, through his whole career and in the circumstances of his death, the profession of medicine will find only something honorable and something to honor. He, and he alone, impersonates the principles this monument is intended to weld in imperishable bronze. Fortunately, Sully, in his splendid portrait, painted soon after Rush's death, the original of which is one of the most treasured possessions of the Pennsylvania Hospital, has preserved for us the benevolent features and dignified form of this great, good doctor.

Your committee does not seek to detract in any measure from the high estimate of that grand surgeon—"the father of American surgery" he has been aptly termed—whose projected statue is an accomplished fact, and the Chairman of this Committee has, least of all, the thought of minifying in any degree one whose personal relations with him were of a peculiarly affectionate character, but, according him all praise, and rejoicing that he is to be so commemorated, your committee reminds you that he was of our own day, while Benjamin Rush was one of the fathers of the Republic, whom Gross himself regarded with reverential and respectful homage.

Were your committee less earnest and enthusiastic in the belief that the monument to be erected to this greatest of American doctors should be one befitting a body of professional men, now numbering about one hundred and ten thousand, it would advise that the $3,000 in its hands be expended for a simple bust to stand upon a plain granite pedestal, but it is unwilling by doing so to make inefaceable record of the fact that this great body of one hundred thousand members of the noblest of the learned professions was unable or unwilling to contribute more than an average of less than three cents apiece to honor a man of whose like but one in a century appears in the history of a nation, and especially does it shrink from this conclusion of its work since the successful completion of the undertaking of the young association, which numbers but one in every thousand of the medical fraternity of the country, and which was only organized four years before this body unanimously and enthusiastically

"*Resolved*, that this Association undertake to erect a statue to Dr. Benjamin Rush, in the City of Washington, by the members of the profession of medicine in the United States."

It is to the infinite credit of the members of the American Surgical Association and their supporters that they have thus honored one who deserved all honor from his colleagues, pupils, friends and admirers; it will be to our infinite discredit if we do less. As Chairman of the Rush Monument Committee, I can and do most heartily congratulate my old and highly esteemed friend, Professor Mastin, of Mobile, the Chairman of the Gross Monument Committee, and I hope to be able to accept the cordial invitation he has already tendered me to witness the unveiling of a work, which has been with him and his associates, a veritable labor of love. There need be no envy of their success, on our part, but only increased incentive for us to do what has become with every year that has passed, a more solemn duty for us, and an increasing labor of love.

It is quite a different matter than fraternal emulation, when it is announced that a monument to Hahnemann is soon to be erected at the National Capital, and if the beautiful artistic design for that monument which I have seen, shall be adopted and executed, more than ever will it be incumbent upon the physicians of America to place no inferior memorial of their own great archiater beside that of a foreign theorist, whose vagarious travesties of medical truth have at most served to enrich a few pseudo-physicians, who have been willing either ignorantly, unconsciously, or deliberately to mountebank medicine for the gain it has brought them. With such a rival in the field, it behooves us to be up and doing, and we come now to ask your very serious, thoughtful consideration of the ways and means of doing. The spasmodic contr bution of a few dollars by a few individuals, under the influence of

personal appeals, at these annual meetings is not enough. A few days ago I completed forty years' service as a commissioned officer in the Navy, and in a few months the legal limitations of age will retire me from active service, and I can never again appear before you as the official representative of a corps with which I have been identified for nearly half a century; nevertheless, I am willing to make the erection of this statue the earnest effort of my future, as it has been my past, but I beg of you now, if you believe this work can be more speedily and satisfactorily accomplished in other hands, to relieve me of the charge, since if I am to continue this work, it must be done with no longer delay, for at three score and two, no man can count upon years, or months, or days, ere his name shall be called on the muster-roll of the dead. Already since the inauguration of this project, Austin Flint, your honored President, who appointed the original committee of seven, and three of these seven, Henry H. Smith, of Philadelphia, Robert A. Kinlock, of Charleston, and John C. Murphy, of St. Paul, have gone beyond the possibility of witnessing its completion, as have Lewis F. Rush, of Wilmington, Del., Surgeon M. K. Taylor, U. S. Army, of Fort Sill, Ind. Ter., and I fear one or two others of their successors from whom I have not heard.

I, therefore, submit to you to decide at this time, and there is no more important subject for your consideration at this meeting, what you, members of the American Medical Association, and you, delegates, who are here representing National, State, county and municipal organizations all over this country, are willing to do as active coadjutors in this effort to erect a monument to Dr. Benjamin Rush, as illustrative of all that is great and good in medicine, and typifying at the capital of the Nation the part that our noble profession has had in the foundation of this great Republic.

Your committee should be reorganized and enlarged by a representative from every National, State, Territorial and district organization, these to act severally as chairmen of sub-committees, composed of members from each county, municipal and local society in their respective departments, States, Territories and districts. An efficient working general committee must be composed only of members willing to discharge their onerous duties. The experiment of issuing a coin-card to individual physicians, with a printed appeal for the inclosure of a silver half-dollar, and a prepaid return envelope, has already been practiced with unsatisfactory result. Perhaps personal letters to every medical practitioner in the Section of the several members of the committee, inclosing an appeal for contribution, and a prepaid envelope addressed to the secretary of the committee, may bear better fruit, but the immediate expense of printing and distribution will have to be borne by the Association upon vouchers certified by the chairman and secretary of the committee, the sums thus advanced to be subsequently refunded annually from the amounts thus collected.

After the reading of the report, Drs. Henry D. Holton, W. H. Daly and John A. Wyeth made eloquent appeals for subscriptions looking toward the erection of the monument, and a number of members subscribed various sums.

DR. HOLTON then moved that the report be accepted, and that the thanks of the Association be tendered to the Committee for its work. Seconded.

DR. I. N. QUIMBY, of New Jersey, moved, as an amendment, which was accepted, that the report be published in the JOURNAL. Carried.

DR. J. W. HOFF moved that each delegate to the Association be appointed a committee to collect funds for the Rush Monument from their fellow practitioners and transfer the amounts to the Treasurer of the Committee on Rush Monument at as early a day as practicable. Seconded and carried.

The President then called for the reading of the Report of the Permanent Secretary. The report was read, and is as follows:

REPORT OF THE PERMANENT SECRETARY.

Gentlemen:—In obedience to the instructions adopted at your last meeting, the inclosed circular was sent to the several State medical societies, and also to each county or district society known to be in affiliation with these. As yet, I have to receive replies from a number, but I have been able to obtain sufficient data to report quite fully on that part relating to the first resolution. There appears to be a general awakening in nearly every State, and several have set on foot earnest efforts to increase not only the membership of the State body, but to produce an improvement in that line in the respective local societies. Notably I may mention Pennsylvania, which has appointed a committee to attend to this matter, and already two societies have been revived and made efficient, and many others have much increased their membership. The interests of the American Medical Association have also been kept in sight, and all who were not connected with it have been urged to join.

In the matter of arranging the dates of meeting so as not to interfere with the meetings of this Association, nothing has yet been done, though I have addressed a second communication in certain instances urging attention to this and to the subject of "a uniform standard of professional requirement for admission to the practice of medicine and to aid as far as possible, in advancing the scientific status of the same by the appointment of State Examining Boards, independent of the teaching faculties of the medical colleges." I hope next year to report that action has been taken at least by some on this very important matter.

The several State medical societies through their secretaries have furnished me the following information:

Alabama: An auxiliary society in every county in the State, 66. Generally the best men in the county are members. Membership in the county society constitutes membership in the State association. In all, 1,067 members.

Illinois: Membership 695.

Idaho: Membership 35.

Iowa: Membership, 600. Fayette County, 34; Cherokee County, 22; Clinton County, 34; Washington County, 22; Southwest Iowa, 58; Harrison County, 7; Dubuque Medical, 30; Cedar Valley Medical, 139; Council Bluffs Medical, 19; Botna Valley Medical, 31; Wapello County, 26; Story County, 17; Medical Association N. W. Iowa, 33; Big 4 ("Four"), 41; Warren, 15; North Iowa Medical, 30; H. and S. Medical, 9; Iowa Central, 30; Lyon County, 13; Central District, 49; Jackson County, 14.

Kentucky: Membership 455.

Louisiana: Membership 386.

Maryland: Membership 456.

Massachusetts: 2,000. Barnstable District Medical, 25; Berkshire, 50; Bristol North, 40; Bristol South, 60; Essex North, 80; Essex South, 120; Franklin, 25; Hampden, 90; Hampshire, 40; Middlesex East, 40; Middlesex North, 90; Middlesex South, 245; Norfolk, 210; Norfolk South, 25; Plymouth, 50; Suffolk, 470; Worcester, 130; Worcester North, 40.

New Hampshire: Membership 290.

New York: (State Medical Association). King's County, 100.

North Dakota: Membership 200. Cass County, 25.

Pennsylvania: Membership, 1,300. Allegheny County, 200; Armstrong, 21; Beaver, 30; Berks, 50; Blair, 52; Bradford, 21; Bucks, 41; Butler, 33; Cambria, 34; Carbon, 19; Centre, 23; Chester, 31; Clarion, 24; Clearfield, 23; Clinton, 24; Columbia, 20; Crawford, 22; Cumberland, 23; Dauphin, 43; Delaware, 36; Elk, 16; Erie, 30; Fayette, 44; Franklin, 31; Greene, 13; Huntingdon, 18; Indiana, 17; Jefferson, 35; Lackawanna, 49; Lancaster, 92; Lawrence, 16; Lebanon, 13; Lehigh, 34; Luzerne, 73; Lycoming, 57; McKean, 11; Mercer, 28; Mifflin, 16; Montgomery, 56; Montour, 15; Northampton, 51; Northumberland, 31; Perry, 22; Philadelphia, 639; Schuylkill, 58; Somerset, 24; Susquehanna, 30; Venango, 32; Warren, 26; Wayne, 18; Westmoreland, 67; Work, 31; Washington, 40.

Rhode Island: Membership 248.

Vermont: Membership 192.

Wisconsin: Membership 400.

District of Columbia: Membership 370.

Arizona: Membership 40; Mariposa County, 20; Yavapai County, 10.

In addition to the replies received from the State societies, a large number of county or district societies have sent me very full reports. Several of these appear to have taken hold of this subject with enthusiasm, and are determined to enroll in their ranks every eligible member of the profession practicing in their bounds.

The following States have the county or district societies in affiliation:

Alabama, full list of societies; Arkansas, only partial list; California, 20 counties; Colorado, 9 counties; Connecticut, 8 counties; Illinois, 50 local societies; Indiana, 70 counties; Iowa, 21 county and district; Kansas, 1 district; Kentucky, no list; Maryland, 3 districts; Massachusetts, 18 districts; Michigan, 20 districts; Minnesota, 3 counties; Montana, 1 district; Nebraska, 15 districts; New Jersey, 21 counties; New York, 2 counties; Ohio, 54 districts; Pennsylvania, 54 counties; this State has 2,500 members in affiliation; South Carolina, 6 counties. Of none of these have I been able to secure anything certain; Tennessee, no information, though I am assured that a number of district societies are in affiliation; Texas, 30 districts are reported, but only a few have replied to my inquiry; Utah, no State body, 2 district societies; West Virginia, 1 society.

The following States have only State medical societies. Any local societies that may exist are not in any way connected with the State society:

Delaware, Florida, Georgia, Idaho, Louisiana, Maine, Mississippi, Missouri, Nevada, New Hampshire, New Mexico, North Carolina, Oregon, Rhode Island, South Dakota, Vermont, Virginia, Washington, Wisconsin.

In addition, the Territories of Arizona, Indian and Oklahoma have Territorial societies. Medical Association of the District of Columbia.

Should a future report of this nature be demanded, I hope to be able to give the membership in numbers of each State body, and with it the number of eligible physicians in each State. Respectfully, W. B. ATKINSON, M.D.

On motion of Dr. Quimby, the report was accepted.

THE PRESIDENT—We will now listen to the report of the Treasurer.

The Treasurer, Dr. Henry P. Newman, of Chicago, then read his report as follows:

TREASURER'S REPORT.

In submitting my first annual report as the Treasurer of the American Medical Association, I desire to offer a word of explanation in regard to some matters which have, perhaps, been less satisfactory than could be desired, and a word of suggestion as to the furtherance of our mutual interests.

At the time of my election, last June, the business pertaining to this office came at once into my hands, while I did not receive the books of the former incumbent until two months afterward. This delay created so much confusion in matters of record and book-keeping that it was found impossible to reduce the office work to a system immediately. And when the books were received, the task of comparison and revision, augmented by the ever increasing current work, became very onerous and required careful personal attention supplemented by the aid of a clerical expert to bring about a smooth adjustment of our running gear.

It is now generally known that the office of the Treasurer has been moved to Chicago and there should be no more cause to complain of the carelessness of members continuing to send in their dues to Philadelphia, causing the former Treasurer unnecessary labor and annoyance, and more or less confusion in their individual accounts.

The clerical difficulties arising out of these conditions are lessening with the passing of the year, and with the adoption of a new method and the coöperation of the members will soon be impossible altogether.

Having made the financial interest of the Association a careful study since my incumbency and endeavored to reduce the business of the office to as practical, accurate and economical a basis as is possible, I have these suggestions to make with the view of simplifying our methods, and at the same time attaining the greatest possible efficiency.

In the first place, I would strongly urge upon the Association the expediency and the necessity of changing the fiscal year, which now runs from June to May, or May to June, shifting according as the meeting is held in the North or South, to coincide with the calendar year, subscriptions running in future from January to December inclusive.

Many members who have paid toward the close of the past year, (in March or April), their subscriptions being past due, make the quite natural mistake of supposing that they are paying for 1895-96.

This necessitates much correspondence and some misunderstanding on the part of individuals, and I feel sure that a change of the fiscal year would result in nothing but benefit to the Association.

The next suggestion has in view the abrogation of the so-called "three-year rule," by which members are kept in good standing two years after their subscriptions have expired. This is no doubt with generous and kindly intention, but it is manifestly unfair to those who pay annually and whose contributions support the institution with all its benefits and privileges.

There are always in any body of men the few who would be inclined to take advantage of such lenience, and in the minds of such there seems to be an impression that the dues of this Association are payable only once in three years.

In conclusion, I would congratulate the Association upon the excellent financial showing of the past year, the receipts being for the eleven months proportionately greater than those of any other year, notwithstanding the small meeting at San Francisco.

This surplus has been, I believe, judiciously expended in the better equipment of our representative JOURNAL which is fast becoming one of the leading publications of the medical world, and to the circulation of which, and to the efforts of its able Editor, the growing success of the Association is largely due.

Respectfully submitted.

DR. H. P. NEWMAN, Treasurer, in account with the American Medical Association.

1894.		DR.
Aug. 11.	To cash, Dr. R. H. Plummer, from delegates and members at San Francisco meeting	$ 2,134.91
" 21.	To cash, Dr. R. J. Dunglison, former treasurer	6,565.78
1895.		
Apr. 30.	To cash, Journal A. M. A., advertising contracts, subscription fees, etc., etc., to date	15,425.74
" 30.	To cash, Journal A. M. A., insurance for damage to Journal office by fire	579.00
" 30.	To cash, dues paid by members to date	10,560.67
	Total	$35,266.10

1894.		CR.
July 10.	By cash, Dr. Perry H. Millard, Trustee, expenses of attendance at annual meeting, San Francisco	$ 110.00
" 24.	By cash, C. F. Johnson, stenographic work at San Francisco meeting	250.20
" 25.	By cash, Dr. E. E. Montgomery, Trustee, expenses of attendance at annual meeting, San Francisco	170.25
" 27.	By cash, Wm. Whitford, stenographic work for Journal A. M. A.	15.50
" 28.	By cash, Casey & Sons, desk for Treasurer's office	40.00
Aug. 20.	By cash, dies, stamps, etc	5.95
" 21.	By cash, book for membership roll	9.00
" 28.	By cash, Dr. E. F. Ingals, Trustee, expenses of attendance at annual meeting, San Francisco	55.00
Sept. 5.	By cash, Western News Co., letter press, etc	10.42
Oct. 30.	By cash, postage to date	110.00
Nov. 27.	By cash, Dr. C. G. Comegys, expenses on Committee of Secretary of Public Health	45.20
" 27.	By cash, Dr. E. F. Ingals, book-keeping expenses	3.50
" 28.	By cash, Dr. A. Garcelon, Trustee, expenses of attendance at Trustees' meeting, Chicago	119.00
Dec. 12.	By cash, Treasurer, clerk hire to date	125.00
" 31.	By cash, Eagle Stamp Works, stamp and numbering machine	9.85
1895.		
Mar. 1.	By cash, Western News Co., letter press desk	6.04
" 4.	By cash, Dr. I. E. Atkinson, advance payment on rent of hall at Baltimore for May meeting	50.00
" 5.	By cash, Dr. J. W. Trueworthy, Los Angeles, Cal., dues in excess refunded	5.00
" 30.	By cash, Dr. Wm. B. Atkinson, Secretary, expense account	195.44
" 30.	By cash, Dr. H. P. Newman, Treasurer, sundries to date	19.50
Apr. 2.	By cash, postage	50.00
" 30.	By cash, Treasurer, clerk hire	135.00
" 30.	By cash, expense account of Journal A. M. A. to date	29,344.97
" 30.	By cash, balance on hand	4,881.28
	Total	$35,266.10

Approved by the Auditing Committee.

On motion, the report was accepted.

The Business Committee presented the following:

To the American Medical Association:—Recognizing that one of the main functions of the General Business Committee, as defined in the By-Law creating it, is "to promote the welfare of the Sections," your Committee took under consideration the proposed amendment to Article II of the By-Laws, relating to the creation of a Section on Orthopedic Surgery.

After a full and careful consideration of the matter the following resolution was adopted:

Resolved, "That in the opinion of the General Business Committee, the organization of a Section devoted to Orthopedics is not expedient."

Signed, L. D. BULKLEY, Secretary.

On motion the report was adopted.

The Permanent Secretary read the following:

COMMUNICATION FROM THE SECTION ON STATE MEDICINE.

BALTIMORE, MD., May 7, 1895.

To the President and Members of the American Medical Association:—The following suggestion embodied in the address of the Chairman, Dr. Liston H. Montgomery, read before this Section this afternoon, was upon motion unanimously adopted, and referred to the General Session of the Association with the request that it be read there, and that similar action be taken regarding the appropriation as follows:

"Permit me to suggest that we advise and recommend to the Association in General Session, ere its final adjournment, that the perpetuity of the Special Committee appointed by the American Medical Association, be continued, to memorialize Congress to establish another branch of the Federal Government, to be known as the Department of Public Health with a Medical Secretary of same. That this committee be clothed with additional substantial authority and with the request also from this Section that sufficient financial aid from the Treasury of the Association be appropriated, which should not be less than $1,000 for the ensuing two years to defray the necessary expenses of the said committee."

Very respectfully submitted,

CHAS. H. SHEPARD, M.D., Secretary.

It was moved and seconded that the report be referred to the Business Committee.

DR. JOHN B. HAMILTON—Mr. President, I move to amend that motion, that so much of the resolution as refers to an appropriation be referred to the Board of Trustees. Seconded.

DR. CONNOR—I think this matter ought to be referred to the Business Committee for consideration in a deliberate manner; then the Association can better understand what to do with it.

DR. DUDLEY S. REYNOLDS, of Kentucky—I move as a substitute, that the report or suggestion contained in the address of the Chairman on State Medicine be referred back to the Section to formulate something more definite for our consideration. Seconded.

DR. LISTON H. MONTGOMERY, of Chicago—I move that the substitute be laid upon the table. Seconded and carried.

The original motion of Dr. Hamilton was then put by the President and carried.

On motion of Dr. E. F. Wilson, of Ohio, it was unanimously

Resolved, That this Association most respectfully appeals to the colleges of the country to at once carry into execution the provisions of the four years curricula of study. Be it further

Resolved, That we deplore the efforts being made to amend the rules governing the curricula of study in the Association of American Medical Colleges looking to the defeat of the present requirements governing the granting of degrees.

DR. WM. E. QUINE, of Chicago, then delivered the "Address in Medicine."

On motion of Dr. E. S. Talbot, of Chicago, the following were elected members by invitation: Drs. S. A. Hopkins, Boston, Mass.; J. G. Humslen, Baltimore, Md.; W. A. Miles, W. S. Twilley, Jos. Roach and W. J. Waters, of Baltimore.

An invitation was read from the Mississippi Valley Medical Association to attend their session at Detroit, Michigan, in September 3–6, 1895.

On motion, the Association adjourned until Thursday morning, 10 o'clock.

MAY 9—THIRD GENERAL SESSION.

The Association was called to order by the President at 10:30 A.M.

MR. THOMPSON, Chairman of the American Pharmaceutical Association, was invited to a seat on the platform.

The Permanent Secretary read the following from the Judicial Council:

BALTIMORE, May 9, 1895.

DECISIONS OF JUDICIAL COUNCIL.

The protest of members of the Allegheny County Medical Society of Pennsylvania against the registration of a former member of that society and the appeal of said member against the decision of the Allegheny County Medical Society is referred to the Medical Society of the State of Pennsylvania for adjudication, with privilege of appeal to the Judicial Council of the American Medical Association after said adjudication.

The protest against registration of members of the Cleveland Medical Society is referred to the Ohio State Medical Society for adjudication; the applications for registration are to remain suspended until the case has been adjudicated by the Ohio State Medical Society, and if any member of the Cleveland Medical Society has already been allowed to register his money is to be refunded.

The charges and protest against a physician of St. Louis are not in proper form to come before the Association.

JOHN B. ROBERTS, Secretary of Judicial Council.

The Permanent Secretary began to read the minutes of Wednesday, when Dr. Holton arose and moved that further reading of them be dispensed with. Carried.

DR. E. E. MONTGOMERY, of Philadelphia, read the report of the Board of Trustees.

REPORT OF THE BOARD OF TRUSTEES.

BALTIMORE, May 8, 1895.

Mr. President:—The Trustees in presenting their Annual Report, have the honor to direct your attention to the fact that it covers but eleven months, as the meeting of last year was in June.

The receipts from all sources have been	$35,245.90
The expenditures were	30,884.82
Leaving a balance on hand of	5,361.08

The receipts of the JOURNAL have been:

From advertising	$12,545.91	
From subscriptions	1,569.75	
From reprints	1,674.67	
From cash sales	203.21	
From Ins. paid on account of fire	579.00	
	$16,572.54	
Expenditures—By cash, H. P. Newman		$16,009.04
" " Deposit in bank		452.77
" " Expense		88.23
Balance in Office		22.50
		$16,572.54
Expenditures by Treasurer		29,344.97
Cost of the JOURNAL to the Association		12,772.43

Of this amount $6,291.24 was expended for new machinery.

The JOURNAL now possesses a plant worth about $10,000.

The Trustees consider the success of the JOURNAL during the monetary depression of the past two years as a subject upon which you should be congratulated. The JOURNAL contains more reading matter than any similar publication in this country.

The favorable outlook for the future, has led the Trustees to institute measures for the immediate improvement of the JOURNAL through more frequent illustrations and the extension of its editorial scope. The Trustees confidently assert that none of its contemporaries present advertising pages that are as free from objectionable material.

During the year no advertisements of secret remedies have been accepted that were not accompanied by a formula, but to still further comply with what appears to be the desire of a large number of those interested in the highest success of the JOURNAL, the Editor, with the termination of present contracts, has been instructed to accept no advertisements of medicinal preparations, the proprietors of which do not give a formula containing the official or chemic name and quantity of each composing ingredient to be inserted as a part of the advertisement.

The work of the office was greatly discommoded by a fire March 31, the money loss from which has been fully covered by insurance.

The Trustees respectfully recommend that the fiscal year of the Treasurer and the JOURNAL be made to correspond with the calendar year, believing the adoption of such plan will greatly simplify the keeping of the accounts and better enable them to make yearly comparisons. Now, the fiscal year varies from eleven to thirteen months in different years.

In conclusion, the Trustees desire to express their appreciation of the untiring and loyal devotion of the Editor; of the earnest coöperation of the various employes who uncomplainingly have borne the discomforts incident to moving the office, and resulting from the fire which recently occurred in the JOURNAL office. Respectfully submitted,

ALONZO GARCELON, JOHN W. GRAHAM,
E. FLETCHER INGALS, PERRY H. MILLARD,
JOSEPH EASTMAN, JOHN ELIOT WOODBRIDGE,
DAVID W. GRAHAM, E. E. MONTGOMERY.

The report elicited considerable applause during its reading.

THE PRESIDENT—You have heard the report of the Board of Trustees; what will you do with it? Before taking action upon it I have a suggestion to make: This report is a very important one and may require some little time to discuss. We have here this morning the prospects of an excellent address on surgery by Dr. Wheaton, and I fear that if we enter into a discussion of this report many of the members will become tired and leave the hall before the Doctor has a chance to read his address. I know from personal experience that when a man takes the trouble and pains to prepare an address, he likes to have a good audience to listen to him, and I would therefore suggest, with the consent of the Association, that we now hear Dr. Wheaton's address and discuss the report of the Trustees immediately afterward.

DR. SOLIS-COHEN—Mr. President, I object. I do not desire at this time to interfere with, but to facilitate the business of the Association. The Association is to be congratulated, as well as the Trustees, that it can at last stand upon an honest platform. The report deserves our hearty approval. Their work should be emulated. (Applause). Now we can go forward, when the time arrives, and demand that every other American medical journal shall make its pages clean from the shame of patent medicines, and unless they do this they should not receive the support and subscriptions of the members of the American Medical Association. (Applause). On behalf of the Pennsylvania delegation, as commissioned by them officially, and unofficially on behalf of the hundreds of members who came to me, as well as of various medical societies, to express their desire that we go forward to cleanse the JOURNAL, I move the approval of the report of the Board of Trustees. (Applause.) Seconded and unanimously carried.

DR. C. A. WHEATON, of Minnesota, then delivered the "Address on Surgery."

On motion, a vote of thanks was extended to Dr. Wheaton for his able address.

DR. W. C. SPALDING, of New York City, offered the following:

Mr. President and Members of the Association:—With the object of increasing the bond of fellowship that already exists in this honorable body, increasing its scientific advancement, and as an incentive to larger membership, the reader has been thinking seriously as to what course we might take in order to make our organization more widespread, more attractive and better attended at our annual meetings.

It has occurred to me that if this honorable body would give its attention to the question of increase and growth, that we can very greatly add to our numbers and, at the

same time, by adopting a comparatively slight increase in our dues put ourselves in such a position that in a few years we may have a local habitation as well as a name, among scientific bodies.

I would like to call the attention of the Association to a plan to which I have given considerable thought, thinking that if carried out it would surely add to our prestige as a body, our good fellowship as a fraternity, our opportunity for clinical and other scientific demonstration.

This plan is to increase the annual dues of each member $1, which is to go to a purchasing and building fund to be kept until it has reached an amount large enough to purchase the site, as may be agreed upon by this body, when it shall have reached a sufficient amount for a payment upon or a complete purchase of such location as this body by its vote shall determine. What we desire is a fine National hall of our own, to which we may gather annually, with the feeling upon the part of each member that it is ours and is our home to which we shall all gather yearly, and perhaps as the years roll by we may consider the advisability of establishing in connection with it a place of comfort and rest for those of our profession who in giving to others have robbed themselves of the fruits that should have blest their old age, those whose faculties have been dimmed through hard pursuit of relief to suffering humanity, and those who by disease and accident have been disabled from further pursuing their chosen profession, but who in all honorable means have endeavored to advance the cause of scientific healing of their fellow men.

DR. B. B. GODFREY, of Michigan, in accordance with the above, offered the following:

In reference to the foregoing resolution I make the following motion:

That the members of the Association raise their annual assessment $1, for the purpose of creating a building fund; that the President be hereby empowered to appoint a committee consisting of one permanent member from each State and territory represented in this Association, whose duty shall be to solicit subscriptions to this fund, and act as an advisory board to the trustees of this Association, in reference to the investment of the fund as it shall accumulate. That the President shall appoint the committee in the following manner: as nearly as possible one-third for one year, one-third for two years and one-third for three years, and at the expiration of their terms their successors be appointed for three years. This committee shall report at each annual meeting of the Association the amount of the subscriptions received in their respective territory.

DR. X. C. SCOTT, of Ohio—I move that the matter to which we have just listened be laid over until next year, inasmuch as it is virtually changing the By-Laws of the Association. Seconded.

DR. P. H. MILLARD, of Minnesota—I move, as a substitute, that the whole matter be indefinitely postponed. This Association is the representative body of the profession of America. We have entirely too many associations at the present time and to raise funds for the purpose outlined is not practicable. It is the duty of this Association to father its JOURNAL, to build it up. It is the greatest journal of the Western continent to-day. (Applause.) Its Trustees have been making a struggle financially to put both the JOURNAL and the Association upon their feet, and we desire adequate financial support. The moment we divert funds for the purpose named it will be a sad day so far as the future usefulness of the JOURNAL is concerned. (Applause.)

DR. JOHN B. ROBERTS, of Philadelphia—I move to amend Dr. Millard's resolution, that it be referred to the Business Committee. Seconded and carried.

DR. A. KOENIG, of Pittsburg—The Board of Trustees having cleansed the JOURNAL of secret advertisements, I rise to move a vote of confidence in the Trustees for their action in now eliminating objectionable advertisements from the pages of the JOURNAL. Long may they live. (Applause.) Seconded.

DR. JOHN B. HAMILTON, of Chicago—I think it is unfair to allow the statement that has just been made to go on record without a little correction and explanation. The question decided on Monday was not a question of approval or disapproval of the Trustees, but whether they should be forced to make a report or not, and whether a committee should be appointed over them, and it is hardly fair to imply that the Association one day approves an act of the Board of Trustees, and then on the next day approves another act of a different kind. The vote of confidence was passed on Monday and again to-day when its report was adopted. I therefore make a motion to reconsider. Seconded.

THE PRESIDENT—If the Association has already voted its good will and confidence in the Board of Trustees, it seems to me it is all that is necessary

DR. KOENIG—The Association can scarcely go on record as not approving the action of the Board of Trustees.

DR. JEROME COCHRAN, of Alabama—I rise to a question of personal privilege in regard to this matter. The gentleman, who offered the last motion, seems to have had my speech in mind when he made it. When I spoke on a previous occasion, it was not my object to eulogize the action of the Board of Trustees in eliminating the advertisements of private remedies, but to vindicate the Trustees themselves; to have this Association assert that they had placed the matter in the hands of the Trustees; that they were willing to trust the Board of Trustees; that they did not require to have guardians appointed for their guidance in this matter. That was the object of the speech I made. (Applause.)

DR. KOENIG—Three years ago in Detroit the Board of Trustees were requested to exclude objectionable advertisements from the pages of the JOURNAL. They did not do it. Now they have done it. The other day a statement was made that no other journal in the country excluded these advertisements. I know to the contrary, and the journals live, and why should not the JOURNAL be an ideal one, representing the best element of the profession of this country, by excluding quack advertisements from its pages. We do not need their filthy money. We do not want it. (Loud applause.)

On motion of Dr. Cohen, the motion to reconsider was tabled without objection.

DR. E. D. FERGUSON, of Troy, N. Y.—I rise to request a ruling from the Chair on matters that may come before the Association under the head of Miscellaneous Business. It is with reference to amendments to the Constitution and By-Laws, as printed on pages 8 and 9 of the program. (The following are the amendments referred to):

AMENDMENTS TO THE CONSTITUTION AND BY-LAWS.

(Offered in previous years and laid over from 1893 and 1894.)

Offered by DR. C. A. L. REED:

Amend Article II, Section 1, of the Regulations, by inserting after the words United States, the words "The Dominion of Canada, Labrador and Newfoundland," and that such other changes be made in the phraseology of the Regulations and By-Laws as to make the same conform to this contemplated enlarged jurisdiction of the Association.

By DR. I. N. QUIMBY:

"That Thursday morning's General Session be omitted, and the time be devoted to Sectional work."

By DRS. JOHN MORRIS and J. G. KIERNAN:

Amend Section 7 of the Constitution entitled, "The General Business Committee," as follows: "It shall be the future duty of the General Business Committee to make and present the nominations for the officers of the Association and its Standing Committees, and recommend the time and place for the meeting of the Association.

"The General Business Committee of the Association shall perform all duties hitherto performed by the Committee on Nominations, which is hereby abolished. All sections of the Constitution and By-laws, or parts thereof, inconsistent with the amendment are hereby repealed."

By DR. F. F. DOW:

Amend By-Law No. XI, relating to the Judicial Council. The second clause of paragraph 3 shall be amended to read as follows: "The decisions of said Council on all matters referred to it by the Association shall be reported at the earliest practicable moment, and shall be final unless revised by the Association."

By DR. A. B. HOSMER:

"WHEREAS, The constantly increasing number of papers on general surgical subjects presented each year at the Surgical Section of this Association, the reading and even restricted discussion of which prohibit the introduction of any considerable number of papers on strictly orthopedic subjects, which might not prove of universal interest to the general surgeon; and

"WHEREAS, There are already a sufficient and rapidly increasing number of members of the Surgical Section of this Association especially interested in the branch of surgery to warrant it; therefore be it

"*Resolved*, To amend Article II, of the By-Laws, by the addition under the heading Sections, and after 12, Physiology and Dietetics, the following: 13, Orthopedic Surgery."

By DR. F. F. DOW:

Amendment to the Constitution, to be known as Article VIII, entitled "The Code of Ethics:"

"The relations of the physician to the patient, to the public, and to the profession require that he shall be of good moral character, and in his personal and professional conduct without reproach; that he shall avoid pretense and notoriety; that he shall properly qualify himself for professional duty by broad and liberal studies in letters, sciences and arts; that he shall employ reasonable and reputable methods of practice; that he shall respect the laws of the State; that he shall encourage efficient means for the enlightenment of public opinion regarding the responsibilities of medical men and the relation of the citizen to public health, for the cultivation of medical education, for the promotion of the interests, usefulness, and honor of the profession, for the emulation, concerted action, and friendly intercourse among those engaged in it.

"Substituting the Roman numerals IX for VIII.

"All Articles, By-Laws, and Codes inconsistent with this amendment are hereby repealed."

By DR. J. H. RAUCH:

"That on and after July 1, 1897, no one will be admitted to membership in the American Medical Association who has not studied medicine for four years, and attended four annual courses of lectures of at least six months' duration."

BY DR. J. T. PRIESTLEY:

"The entire report on Constitution, etc., as offered in the report of Dr. Holton at San Francisco."

DR. FERGUSON (resuming)—Before I ask the decision of the Chair in reference to this matter, I desire to make one or two statements concerning the amendments and their history at the San Francisco meeting last year. All of the amendments herewith were before the meeting at that place, and by reference to the heading we will find some of them have been laid over since 1893. The amendments were considered at San Francisco, were handled in the various parliamentary ways customary in such matters, and after they had been thoroughly considered and had been acted upon negatively, a final motion was made that all of the amendments to the Constitution and By-Laws and Code of Ethics be indefinitely postponed. Whether any one of these had been up or not at that meeting, the resolution to that effect was broad enough to cover all. Some of the resolutions are entirely impracticable, particularly the one introduced by Dr. Rauch, which would prohibit a large majority of the profession from membership in the Association; that if they should happen to fall out of membership, it would prevent them from ever getting back into it again. In order to simplify matters, I ask for your ruling, sir, as to whether all of these amendments to the Constitution and By-Laws down to the last one (Dr. Priestley's) are not properly before the Association.

THE PRESIDENT—My opinion is that they are not proper subjects for consideration here in the present state of affairs. The course of the Association with regard to them before made it, if not absolutely unparliamentary, at all events, so entirely unwise that it seems to me best to take that course in the matter, and I therefore rule (with the exception of Dr. Priestley's amendment) that they are not proper subjects for discussion at the present time.

DR. COCHRAN—On what different basis does the last amendment stand?

DR. FERGUSON—I am going to explain that. The last amendment, Mr. President, is rather peculiar. It is an amendment to the Constitution, etc., which is extremely indefinite. I know the members of the Association—most of them at least—will recall the whole subject for the last three or four years of our history. It has been incubating since that time. At the San Francisco meeting a large majority of the members voted for indefinite postponement; but we were told from the floor that it was like Banquo's ghost, it would come up and come up, again and again. It would not down. (Laughter.) Some one in the audience at the San Francisco meeting held up his hand, was recognized by the President, and called the attention of the Chair to an amendment to the Constitution. I endeavored to find out what that amendment was. I felt that we ought to know. Some of my neighbors informed me that it was a simple matter; that it had no significance whatever. I went home with that feeling. I read the printed proceedings of the meeting in the JOURNAL, and I had no more light on the subject. Finally, I wrote to the Secretary, and some months after the meeting I found out that the amendment to the Constitution had been but a small slip of paper sent in as the entire report of the committee of which Dr. Holton was Chairman. (Laughter.) Many of you will doubtless recall that that report, as presented at the San Francisco meeting, was not exactly the report as printed in the JOURNAL.

DR. DUDLEY S. REYNOLDS, of Louisville, Ky.—Mr. President, I rise to a point of order.

THE PRESIDENT—The gentleman will please state his point of order.

DR. REYNOLDS—Your entire ruling, sir, is that these amendments are not properly before this meeting, and I hold, sir, that matters not properly before the meeting are not debatable.

THE PRESIDENT—The point is well taken.

DR. REYNOLDS—I now move you, sir, that the amendment offered by Dr. Priestley be indefinitely postponed. Seconded and carried.

DR. COCHRAN—There is another amendment to the Constitution which is not on the program. It belongs to the class of new amendments, and was offered by Dr. Quimby, its object being to strike from the Code of Ethics the clause prohibiting the patenting of surgical instruments. I forget the number of the Section. I move that that amendment be taken up for consideration. Seconded.

DR. N. S. DAVIS, of Chicago—Mr. President, it is certainly with a great deal of reluctance that I ask to be heard for a few moments at this time, not that I regard the subject under consideration of more importance than those that have come before the meeting, but I want to speak a word or two in regard to what I deem fundamental and essential to the perpetuation, the character, and honor of this Association (applause), which should represent by delegation the profession of this broad country as it was originally designed—a true, representative organization, having in view two grand objects: the promotion of fraternal feeling and social intercourse, and the science and art of medicine. (Loud applause.) These objects and no other advance the science and art of medicine. They carry with them the education of the profession, social intercourse, the mingling and fraternal feeling from all parts of our country, contributing immensely to the status and influence of the profession. Now, in looking over the Transactions and following these meetings from the first convention down to this, with only very few exceptions, almost every year somebody has taken it upon himself to alter our Constitution and By-Laws. He is continually picking up something to find fault with. (Applause.) Now, for heaven's sake we have got a Constitution and By-Laws that provide for a representative body. We have an open door that allows every physician in good standing in his local medical society to become a member—a door broad enough to receive the unanimous indorsement and support of the English-speaking people of the globe. (Applause.) Our Association is founded on the same principle as that of the British Medical Association. No man, who has discovered anything of value as a remedial agent, is allowed to keep it secret. If it is a medicine calculated to do good to humanity, he has to make it known freely to his professional brethren and to the world. (Applause.) Again, if any man devises an instrument that is useful for surgical or other purposes, it is his business to let his brethren know about it. There should be no secrets. (Applause.) It is the province of the physician to alleviate human suffering. I have arisen, Mr. President, to move that all of the amendments to the Constitution and By-Laws referred to be indefinitely postponed. Seconded and carried by a large majority.

Here DR. J. T. PRIESTLEY arose and offered a new amendment containing some of the same amendments which had been previously disposed of by the Association.

DR. X. C. SCOTT—I rise to a point of order in reference to the amendment just presented. By previous action of the Association all amendments to the Constitution and By-Laws have been indefinitely postponed, and hence no one of those amendments can be re-introduced at this meeting. That sir, is my point of order.

THE PRESIDENT—My ruling is that inasmuch as action has already been taken in regard to the various amendments, they can not be re-introduced at this meeeting.

DR. JOHN B. ROBERTS—There is a point here that most of the members do not understand. It is the privilege of every member of the Association, the youngest as well as the oldest, to introduce at any time an amendment to the Constitution, and I, sir, appeal from the decision of the Chair. If I understand the matter correctly, the decision of the Chair is that these amendments can not be brought forward at this time. I will ask the President to state his reasons for such a ruling, and then I will present mine, and then we can vote upon whether the opinion of the Chair shall be sustained.

DR. N. S. DAVIS—I wish to call attention to what seems to me an important point in regard to offering amendments. The habit has grown up of late which seems to imply that anybody has a right to propose an amendment to the Constitution and By-Laws. These amendments are given to the officers, and are then laid over. Nobody knows what they are. Now, my own idea is that no one has a right to propose an amendment to the Constitution, unless that amendment is written out clearly, plainly stating the sections he proposes to amend, and after it is proposed it should be stated from the Chair definitely, who shall ask for a vote to either accept it or to lay it on the table.

DR. W. H. DALY, of Pittsburg—I concur with Dr. Davis that it is not right for amendments to be laid over to incubate for a year without knowing what they are. The proper way, it seems to me, is to read them and then lay them over.

THE PRESIDENT—I have no objections to the amendments, but when you have voted to indefinitely postpone them, and then move to re-consider the subject, it strikes me as a rather peculiar way of treating the matter.

DR. N. S. DAVIS—The only way in which subjects of the same character can be re-introduced at this meeting, after having voted for indefinite postponement, is to move a re-consideration of the vote of postponement, and then we will get that before us.

DR. JAMES F. HIBBERD, of Indiana—My understanding about the parliamentary rule in regard to this matter is this, that if the matter be a series of resolutions and they are laid over, you can take some part or distinct proposition and consider it, but I do not propose to consider what has been indefinitely postponed. I merely desire to state my recollection of the parliamentary law, which, I believe, is just as I have given it.

DR. A. L. GIHON—It is a rule in mathematics that the greater includes the less.

DR. HIBBERD—That may be where you come from. (Laughter.)

DR. I. N. QUIMBY—Any subject that has been indefinitely postponed during this session, or any amendment germane to it, can not be re-introduced at this time.

THE PRESIDENT—I adhere to my original ruling. Dr. Roberts appeals from the decision of the Chair. I will put the motion of appeal.

A MEMBER—I move that the motion to appeal from the decision of the Chair be laid upon the table.

DR. ROBERTS—You can not lay a motion to appeal on the table. If some gentleman here has seen fit to offer an amendment to the Constitution, I claim that he has a right to be heard, a right to have it read, and then laid over. No President has a right to shut off any member. We can protect him by appealing from the decision of the Chair. The Chair must then state his reasons, and the gentleman who offers the amendment or amendments must also state his objections to the ruling of the Chair. The Chair must then state to the Association, "Shall the Chair be sustained?" It is certainly an unjustifiable proceeding to shut off any man from introducing an amendment to the Constitution which is to lie over. He has a right to have it read, to have it spread upon the minutes, and no President has authority to shut him off. (Applause.)

PRESIDENT MACLEAN then put the motion of appeal, and the Chair was sustained.

THE PRESIDENT—I endeavor to give the members of the Association every possible privilege, and I shall do my best to protect them. If any amendments are to be introduced, they shall be read from the stage and laid over, and voted on at the next meeting. But, gentlemen, I do object to resolutions or amendments being quietly introduced and then laid over as a trap for my successor. (Applause, and cries of That's right!)

The Section on Obstetrics and Diseases of Women reported the following named officers for the ensuing year: Chairman, J. Tabor Johnson, Washington, D.C.; Secretary, Reuben Peterson, Grand Rapids, Mich.

The Section on Physiology and Dietetics reported the following named officers for the ensuing year: Chairman, H. Bert Ellis, of Los Angeles, Cal.; Secretary, Henry Salzer, Baltimore, Secretary.

The Section on Dermatology and Syphilography reported the following named officers for the ensuing year: Chairman, L. Duncan Bulkley, New York City; Secretary, T. C. Gilchrist, Baltimore, Md.; Executive Committee, L. A. Duhring, Philadelphia, Pa.; A. H. Ohmann-Dumesnil, St. Louis, Mo.; A. E. Regensberger, San Francisco, Cal.

The Section on State Medicine reported the following named officers for the ensuing year: Chairman, Charles H. Shepard, Brooklyn, N.Y.; Secretary, Elmer Lee, Chicago, Ill.; Executive Committee: for one year, C. A. Lindsley, New Haven, Conn.; for two years, G. W. Stoner, U. S. M.-H., Baltimore, Md.; three years, L. H. Montgomery, Chicago, Ill.

The Section on Neurology and Medical Jurisprudence reported the following named officers for the ensuing year: Chairman, T. D. Crothers, Hartford, Conn.; Secretary, W. J. Herdman, Ann Arbor, Mich.; Executive Committee, Daniel R. Brower, Chicago, Ill.; W. X. Sudduth, Minneapolis, Minn.; W. S. Watson, Fishkill, N.Y.

The Section on Dental and Oral Surgery reported the following officers for the ensuing year: Chairman, R. R. Andrews, Cambridge, Mass.; Secretary, Eugene S. Talbot, Chicago, Ill.; Executive Committee, M. E. Fletcher, Cincinnati, Ohio; Eugene S. Talbot, Chicago, Ill.; A. E. Baldwin, Chicago, Ill.

DR. JEROME COCHRAN, Chairman of the Committee on Secretary of Public Health, reported as follows:

To the President of the American Medical Association:—After the elaborate report made by this Committee at San Francisco last year, our report for the present year need not be very extensive, and we beg to report briefly as follows:

1. Our facilities for doing the important work intrusted to us have been strictly limited by want of funds, the Association having failed to adopt the resolution offered last year for an appropriation not to exceed four hundred ($400) dollars to defray the necessary expenses of the committee, so that such expenses as we have incurred have been paid out of our own pockets.

2. In November we addressed a communication to the officers of State and other medical societies and associations urging them to appeal to the members of their respective organizations to write to their members of Congress in both Houses, requesting them to give their support and their votes in aid of the passage of our bill. To this communication we received very few responses. But it was published in a considerable number of medical and sanitary periodicals, and doubtless accomplished some good. A considerable number of medical and sanitary periodicals also published editorial articles in advocacy of the proposed legislation, and these articles have attracted more or less favorable attention among the members of the profession, and have led some of them to appeal to their members of Congress; but not to such general concert of action by the whole body of the profession as we have desired.

3. In December, some members of the committee visited Washington City for the purpose of ascertaining just what could be done toward pushing our enterprise to a successful result. We found a good many members of Congress who promised us their coöperation whenever a favorable time could be found for the consideration of our bill; but all agreed that it would be impossible to accomplish anything during the continuance of the LIII Congress.

4. It is evident from this brief review of the situation, that to secure the passage of our bill to create a Department and Secretary of Public Health, much vigorous work will be required, and in order that this work may be done it will be necessary for the Association to place at the disposal of the committee an adequate amount of money for current expenses. We will have to do a considerable amount of printing. We will have to enlist the active assistance and coöperation of all the State and municipal medical societies. We will have to keep up a very extended correspondence. We will have to enlist the active assistance of the medical and sanitary periodicals of the country. Sometimes, for perhaps months at a time, we will need the services of a competent clerk. It is for the Association to say whether it is prepared for an effort of this magnitude.

To this end we had prepared a resolution recommending an appropriation, but as this object has been accomplished by the action of the Association on the recommendation of the Section on State Medicine, it is not necessary to offer this resolution.

All of which is respectfully submitted.

(Signed by the Committee.)

On motion, the report was received.

DR. J. M. KELLER, of Arkansas—Is there any By-Law as to when the report of the Committee on Nominations shall be made?

THE PRESIDENT—Not to my knowledge.

DR. KELLER—I desire to offer the following resolution:

Resolved, That the report of the Nominating Committee shall be made on Thursday morning. I do it for the reason that if we wait until Friday, two-thirds of the delegates will have gone to their homes, and when the report is brought in there are only a few men to vote on it—at least, only a handful of men. Seconded.

DR. DALY—I move that the resolution be referred to the Business Committee.

DR. DAVIS—This proposition is not an alteration of the By-Laws, but simply a resolution as to whether the Committee on Nominations shall report at a definite time each year, and I see no objection to it.

A MEMBER—I would suggest that the mover of the resolution be a little more specific as to time—say after the reading and adoption of the minutes on Thursday morning.

DR. HOLTON—This resolution, if adopted, will cut down our meeting to three days instead of four. (Cries of No! No!) The experience of those gentlemen who have been appointed on the Nominating Committee in the past has been that the committee is usually not able to report on Thursday, and the only way to keep members here is to keep them in suspense, to know whether they have got any office or not.

DR. L. D. BULKLEY—Mr. President, I rise to a point of order. All new matter should be referred to the Business Committee, and their action is to be revised or concurred in by the Association. The Business Committee meets daily to consider matters that come before it. If this resolution is referred to the Business Committee, we can report to-morrow morning.

DR. KELLER—I hope in the future the Nominating Com-

mittee will make its report when most of the delegates are present, and not wait until Friday when a large number have gone to their homes.

DR. QUIMBY—This is a resolution that justly and legitimately belongs to the Business Committee. It is simple in its nature; therefore it is not necessary to go through the red tape to send it to the Business Committee, the Judicial Council, or any other place. The Nominating Committee could have reported this morning.

DR. REYNOLDS—I hope, sir, that you will not rule that the Nominating Committee can not report when it has already completed its deliberations and is ready to do so. I know by precedent, sir, that in former years this committee has made its reports on Thursday morning. We have no law prescribing just what day the committee shall report. I hope, therefore, as the committee is ready to report, that there will be no objections to hearing the report now. (Applause.)

DR. HIBBERD—I move the Committee on Nominations be instructed to report "instanter." Seconded.

DR. BULKLEY—I insist, Mr. President, that this matter should come before the Business Committee as prescribed in our By-Laws.

DR. REYNOLDS—This resolution provides for the future conduct of the Nominating Committee, and Dr. Hibberd's motion is the one I insist upon. We want the committee to report now.

DR. E. JACKSON, of Pennsylvania, asked if the whole thing was not out of order and demanded the ruling of the Chair.

THE PRESIDENT—It is not compulsory that this matter be referred to the Business Committee.

Again, Dr. Bulkley rose to a point of order.

So many motions had been offered that Dr. Cohen asked what was in order, to which the President replied, Dr. Hibberd's motion.

DR. COCHRAN—I think I can offer a solution of the whole trouble. Let the resolution of Dr. Keller with regard to the future action come under the rules of the Business Committee, but that does not preclude the report of the Committee on Nominations being made at this time.

DR. KELLER—I am satisfied to have that done.

The Committee was then asked to report, but the Chairman not being present, no further action was taken.

A report from Dr. J. M. Toner, of Washington, D. C., as Chairman of the Jenner Vaccination Centennial, offering his resignation was read, as follows:

WASHINGTON, D. C., May 8, 1895.

To the President of the American Medical Association:

Dear Doctor:—Owing to continued poor health which renders me incapable of attending efficiently to the duties devolving upon the chairman of the committee of this body, authorized to provide a suitable program of exercises, occupying one day of the session of the meeting of the Association resolved to be held in Washington City in 1896, so as to appropriately celebrate the centennial of Dr. Jenner's discovery, vaccination, I must therefore ask to be excused from this service.

I request this in the interest of this, the most important discovery ever made in medicine, and believing that some more capable chairman will be able to make a brilliant success of this undertaking under the auspices of the American Medical Association, I herewith tender my resignation as chairman of the committee and request that some one else be named for the place. The committee as originally constituted was composed of Drs. J. M. Toner, N. S. Davis, T. F. Wood, J. F. Hibberd and H. D. Didama. The decease of Dr. Wood left a vacancy which I was authorized to fill, which I have done by naming Dr. J. S. Billings.

Trusting that the project of providing for the centennial celebration may be carried forward with success, I remain, dear sir, Your most obedient and humble servant,

J. M. TONER, M.D.

DR. N. S. DAVIS—Dr. Toner, as chairman, has given the subject a great deal of attention while his health permitted, and I think it would be well to wait until we hear the report of the Nominating Committee to see whether Washington will be selected as the place of meeting in 1896, as originally agreed upon.

DR. COHEN—If there is any member of the Nominating Committee present, I move that he be privileged to report in part or in full to the Association. (Cries of No! No!)

On motion of Dr. Millard, the Committee on Nominations was requested to report as to the place of meeting.

DR. J. E. REEVES, of Tennessee, announced that Atlanta, Ga., had been agreed upon.

DR. MILLARD then moved that the meeting of 1896 be held in Washington, D. C. Seconded.

DR. KELLER made a speech in behalf of Hot Springs as the next place of meeting; Dr. Gaston one in favor of Atlanta, and Dr. Howe, of New York, urged the selection of Niagara Falls.

After some discussion, participated in by Drs. Gihon and Keller, on motion of Dr. N. S. Davis the whole matter was laid upon the table till the report of the Nominating Committee was made in full.

THE PRESIDENT—Some action should be taken with regard to the communication of Dr. Toner in which he tenders his resignation.

On motion, the resignation was accepted, and the committee empowered to fill the vacancy.

On motion, the Association adjourned.

MAY 10—FOURTH GENERAL SESSION.

The hour for the opening of the session having passed, on motion of Dr. Taneyhill, Maryland, ex-President Dr. N. S. Davis was called to the Chair. The President and Vice-Presidents were all temporarily absent.

The Permanent Secretary began to read the minutes, when, on motion, their further reading was dispensed with.

PRESIDENT MACLEAN now entered and assumed his duties.

DR. HENRY D. HOLTON, of Brattleboro, Vt., read the "Address in State Medicine."

On motion of DR. JOHN B. HAMILTON, the thanks of the Association were tendered to Dr. Holton for his able address.

DR. JOHN B. HAMILTON offered the following, which was adopted:

Resolved, That hereafter, the Permanent Secretary and the Treasurer shall proceed to the place of meeting one day in advance of the opening session, for the purpose of directing and facilitating registration of members and applicants for membership.

DR. OSLER, of Baltimore, offered the following resolution, which was unanimously adopted:

WHEREAS, This Association learns with profound regret that the "Index Medicus" will cease to appear with the current issue, unless very substantial support is immediately given; and

WHEREAS, We recognize the value to our profession of this most complete bibliography and the loss the profession would sustain if it were discontinued; therefore be it

Resolved, That this Association urge its members to individually support this publication with a view to its continuance until such time as more permanent provision can be made.

The Committee on Section on Benevolence reported as follows:

Report of the Committee on a proposed American Medical Benevolent Fund, to be raised by a Section of the Association for the benefit of the Widows and Orphans of Deceased Physicians.

Brief reference may be made to undertakings of the kind in the United States and Great Britain whose aim it is to afford prompt and sure pecuniary help to distressed qualified physicians and their families, especially widows and orphans:

British Medical Benevolent Fund. The President of this Association, founded in 1836, is Sir James Paget, F.R.S. A late report furnished by the courtesy of W. H. Broadbent, M.D., Bart., shows that the whole of the money subscribed is available for the objects of the charity for which the British Medical Benevolent Fund is raised—many of them of utter destitution, and the relief given is not unfrequently all that stands between the recipient and the humiliation of accepting parochial relief. The timely aid thus given has enabled the needy ones to look around and find means for the support of themselves and children. Her Majesty Queen Victoria, the British Medical Association, and the Faculty of Physicians and Surgeons contribute to this fund.

The first Medical Benefit Society in America for the relief of destitute physicians or their families was organized in Boston in 1854. The money distributed to beneficiaries amounts to $9,340, according to Treasurer Dr. Francis Minot's report for 1891.

Next was founded the American Mutual Medical Aid Association of Kentucky, in which an admission fee of $10, and annual fee of $2, secures to the family of a deceased member of the society $2,500, or to one sick, $5 per week.

In 1875 was founded the New York Physicians' Mutual Aid Society, membership 350. Dr. Blumenthal, a late President of this society, says of the work: "The grief and sorrow assuaged by their benefactions no figures or words can express." Its most faithful supporters are bachelors of the medical profession.

In 1878 was formed the Mutual Aid Society of the Philadelphia County Medical Society. Dr. Benjamin Lee, a late President, says of this society: "It seeks to remove the

reproach from the profession that they alone of all callings and crafts make no systematic provision for the relief of brethren in distress and for their destitute widows and orphans left dependent on the cold charities of the world."

The Medical Aid Society of the State Medical Society of Virginia levies an assessment of $1 on the occasion of the death of a member, to be paid over to the family of a deceased physician.

These societies hold annual meetings, and require the applicant for aid to give name, date of graduation, college, means of support and cause of pecuniary distress, and in case of death of a Fellow of the Association, the address and application of the widow or orphans certified by two physicians. It may be added, among prominent physicians in the United States who have given their support and money toward the endowment of a Medical Aid Fund may be named many ex-Presidents of the American Medical Association, viz: the late S. W. Gross, Austin Flint Sr., John Hodgkin, and W. T. Briggs, Prof. N. S. Davis Sr., Lewis Sayre, P. O. Hooper, Henry O. Marcy and the eminent gentleman who at present presides over the Association, Donald Maclean, all of whom have officially declared, "that any practical plan to aid disabled physicians and their families deserves the favorable consideration and support of every member of this Association, and they will gladly favor such an object."

In closing this report your committee will venture the opinion, based upon the facts and proofs above given of the success of the Medical Aid Societies of Massachusetts, of Kentucky, Pennsylvania and of other States, that the time has come for this Association to undertake a like good work according as its wisdom may decide. This appeal your committee would make especially to the Christian physicians of the Association who believe that "pure religion and undefiled before God and the Father is this; to visit the fatherless and widows in their affliction"—and, "if any provide not for his own, and especially for those of his own house, he hath denied the faith and is worse than an infidel."

Finally, your committee believes that if a Section on Benevolence be engrafted upon the Association that ere the close of the nineteenth century its membership will be augmented, its fraternity strengthened and other National organizations, such as the American Public Health, the Surgical and Gynecological, and the Military Surgeons' Associations of the United States will become cordial co-workers with us in this godly duty toward the needy ones of our profession.

Respectfully submitted,

FREDERICK HORNER, M.D., Chairman of Com.

On motion of Dr. Jackson, of Pennsylvania, the report was received, and the committee continued, with instructions to report a feasible plan at the next meeting of the Association.

DR. E. D. FERGUSON, of New York, Secretary of the Committee on Nominations, read the report of that committee, as follows:

REPORT OF COMMITTEE ON NOMINATIONS.

The Committee on Nominations met at 3 P.M., on Wednesday, May 8 and organized by the election of Dr. J. E. Reeves as Chairman and Dr. E. D. Ferguson as Secretary.

After some preliminary arrangements concerning the methods of selecting candidates, etc., the following list of candidates was selected:

President, R. Beverly Cole, California.
First Vice-President, J. J. Chisolm, Maryland.
Second Vice-President, C. Le Grand, Alabama.
Third Vice-President, Augustus C. Clarke, Massachusetts.
Fourth Vice-President, T. P. Satterwhite, Kentucky.
Treasurer, Henry P. Newman, Illinois.
Secretary, Frank Woodbury, Pennsylvania.
Librarian, G. E. Wire, Illinois.

Members of the Board of Trustees: Alonzo Garcelon, Maine; I. N. Love, Missouri; James E. Reeves, Tennessee.

Members of the Judicial Council: N. S. Davis, Illinois; H. D. Didama, New York; John Morris, Maryland; W. E. B. Davis, Alabama; Daniel R. Brower, Illinois; D. W. Smouse, Iowa; M. B. Ward, Kansas, for three years. W. M. Welch, Pennsylvania, for one year.

Address in Surgery, Nicholas Senn, Illinois.
Address in Medicine, William Osler, Maryland.
Address in State Medicine, Geo. H. Rohé, Maryland.

Atlanta, Ga., was then selected as the place of meeting for 1896, and W. F. Westmoreland was designated as the Chairman of the Committee of Arrangements and J. McFadden Gaston, Jr., as Assistant Secretary.

JAMES E. REEVES, Chairman.
E. D. FERGUSON, Secretary.

DR. G. L. TANEYHILL—I move the adoption of all of the report except that pertaining to the place of meeting and the election of the Secretary.

DR. GEO. W. WEBSTER, of Chicago—I second the motion. Carried.

DR. FERGUSON—With regard to the question of election of the Secretary, the point was raised as to whether the committee should have made any nomination at all. There is provision in the Constitution that the Permanent Secretary shall remain in office until, either by death, resignation, or removal, by a two-thirds vote of the Association a change shall take place. Whether it is proper for the Committee on Nominations to bring up that question each year is a question. Personally, I feel that it should not. I therefore move that that portion of the report pertaining to the Permanent Secretary be not agreed to, and that the present incumbent remain in office.

Several members seconded this motion.

DR. I. N. QUIMBY—I have a few remarks to make, and I do so with reluctance because I know what I say will be a divergence from some of my best friends; but under the present circumstances, taking all the views into consideration of the long, faithful service of our present Secretary, which has been, gentlemen, thirty-one years and without a single absence in all those times (applause); an unprecedented attendant upon our meetings, we ought not as a scientific body to cast him aside. Let us do justice to our faithful hard-working men. (Applause.) I tell you, Mr. President, that this magnificent Association whose foundation stone is principally the advancement of scientific medicine for the healing of the nation, can not afford to do Dr. Atkinson an injustice. It can not afford to do a single member injustice, whether he be high or low. Let the sentiment of this Association be *fiat justitia*—exact justice and mercy to every one, whether he be high or low, and let this Association sustain the present Secretary, at least for the present. Let us not send him home as though he had some affliction, but let us try and make him feel happy. I therefore second the motion that the present Secretary remain in office in the place of the one nominated.

THE PRESIDENT—Are you ready for the question? (Cries of Question! Question!)

DR. OSLER—*Fiat justitia* for the Association is all right, but let the quality of mercy be not strained. I stand here and say plainly and honestly before Dr. Atkinson what I and many other members have said behind his back, that he is not an efficient Secretary of this Association, and that we have not found him so. (Hisses, followed by applause.) You may hiss if you will, but I unhesitatingly say that no more important step in advance will be taken by this Association than when it changes its Secretary. (Cries of Question! Question!)

PRESIDENT MACLEAN put the motion that the present incumbent remain in office, and it was carried by a large majority.

DR. I. N. LOVE—It having been determined that this Association has no power to elect its Secretary, I move that the Constitution be amended, so that in future the Secretary shall be elected annually. Seconded.

DR. PRIESTLEY—That is the point I offered in my resolution yesterday.

DR. C. W. BROWN, of the District of Columbia, moved to select Washington as the next place of meeting. This motion was supported by Dr. A. L. Gihon.

DR. JEROME COCHRAN urged Atlanta, Ga. After considerable discussion in which Drs. Gihon, Gaston, Taneyhill, Cochran, Keller, Quimby, Brown, Daly, Bishop, Reynolds, Scott, Davis, Garcelon, and Love participated, Atlanta was agreed to as the next place of meeting.

DR. H. BERT ELLIS, of California, offered certain resolutions recognizing the members of the profession in New York regardless of their affiliation with the body which had abandoned the Code of Ethics.

DR. N. S. DAVIS announced that to entertain these resolutions it would be necessary to alter the Constitution.

THE PRESIDENT decided that these resolutions were out of order.

On motion, Drs. Gihon and Ferguson were appointed a Committee to conduct the President-elect to the Chair.

DR. R. BEVERLY COLE, of San Francisco, was then conducted to the platform and received by the President, amid much applause.

PRESIDENT MACLEAN, in introducing his successor, said: "It gives me great pleasure not only personally but officially to present to you our next President, Dr. R. Beverly Cole, of San Francisco. In doing so I extend to him the heartiest good wishes for his administration in this honorable office,

and I wish to say that if at the next meeting the members of the Association treat him as generously, kindly and nobly as it has the retiring President, he will be a very fortunate, happy and very proud man." (Applause.)

PRESIDENT COLE then addressed the Association as follows: "I apprehend that no man lives but that he at some time in his life has been overtaken by circumstances which paralyze his powers of expression. Such is my position at this moment. Any member would feel proud of being elevated to this exalted position by such a body of men, representing the brains of our profession of the North and South, East and West. The compliment is one that is not only appreciated by my humble self, but my State will feel that it is the handsomest compliment and the proudest day in her history when it shall be wafted across the continent that I have been elevated to this exalted position. (Applause.) In this there is no egotism involved. I am here as the representative of my State and coast. I would not be here otherwise, and then if it be that her representative is elevated to this position, must it not follow that the State herself will feel proud of this compliment as expressed through her humble representative? I want to say here that I am perhaps one of the oldest members of this Association. Many have been the voyages that I have made, that I might mingle with you, from the far-off land where the sun goes down, but leaves the softening influence of its rays upon her people. From that far-off land many have been the voyages I have made at a cost of three months' time. But there was some attraction for me, and I leave it to you to divine what that possible attraction has been. Since our facilities have increased I have attended the meetings almost regularly, with the exception that there was an interruption for four years of my visitations owing to impaired health. Thank God I have been measurably restored, and that an opportunity has been furnished me to return to the fold and to receive this hearty recognition at your hands.

"In my administration I shall endeavor to rule fairly, impartially, but you may depend upon one thing. I will endeavor to understand clearly and intelligently every question as it may be presented and rely upon my intelligence and interpretation of the law in my rulings. But there will be no hesitation. I shall rule firmly, but to the best of my ability and understanding with the light before me. (Applause.) I beg of you, then, that should it be my privilege and yours to meet at Atlanta next year, I trust I shall have your entire support. You may rely upon me doing my duty. I want you to come to me and give me the benefit of your advice. While in this exalted position, I am, so to speak, a little deity, but I want to tell you that I am but a man, subject to all the infirmities and errors of judgment that characterize other men; yet I feel that I can receive great assistance at your hands by timely advice, and this I now solicit. With these brief remarks I again thank you for the distinguished honor that you have conferred upon my State through this humble individual." (Applause.)

The President then appointed the following delegates to societies abroad: W. H. Daly, J. A. Ouchterlonie, I. N. Love, C. G. Chaddock, L. H. Montgomery, A. E. Rockey, I. N. Quimby, and H. H. Bridle.

DR. GEORGE W. WEBSTER, of Chicago, offered the following, which was unanimously adopted:

Resolved, That a vote of thanks be tendered to the city officers, the Reception Committee, the Committee of Arrangements, the local profession and citizens, and the public press for the hearty welcome, the magnificent entertainment, the unlimited, spontaneous courtesy and hospitality, the accurate reports of proceedings, during our pleasant sojourn in the Monumental City; also a vote of thanks to the President.

DR. GEORGE H. ROHE, of Maryland, submits the following amendments to the Constitution:

1. After Par. 8, of Article II, insert the following:

"Active members shall consist of such permanent members as have attended three meetings of the Association and shall have all the privileges of delegates, so long as they conform to the regulations of the Association."

2. Insert in line 6, of Par. 6, Article IV, relating to duties of officers:

"He shall, in conjunction with the Local Committee of Arrangements, make complete arrangements for the verification of the credentials of delegates, and for the registration of members. He shall also prepare annually an accurate list of members of the Association."

3. That ordinance No. 18 be amended by substituting "The Permanent Secretary" for "Committee of Arrangements."

THE SECRETARY then read the

REPORT OF THE GENERAL BUSINESS COMMITTEE.

Upon the request of the Section on Materia Medica and Pharmacy, the General Business Committee, recommends to the Association that the work in therapeutics be added to that of the Section, and that the name of the Section be changed to that of the Section on Materia Medica, Pharmacy and Therapeutics.

Upon the unanimous request of the Section on Dermatology and Syphilography, the General Business Committee requests that the name of the Section be changed to that of the Section on Cutaneous Medicine and Surgery, as it is believed that thereby there will be greater interest excited in the work of the Section on the part of the general practitioner.

The General Business Committee indorses the following recommendations from the Section on Materia Medica and Pharmacy:

Resolved, That in view of the adoption of the metric system in the U. S. Pharmacopœia, this Section recommends the more thorough instruction of the students at the medical schools in the use of metric weights and measures, and further recommends that physicians, when writing metric prescriptions, always make use of the signs Grm. and Cc. to distinguish between quantities by weight and volume.

The General Business Committee gives notice of an Amendment to Article —, Section VII, relating to the establishment of the Committee, to the effect that, "officers of Sections shall fill vacancies temporarily in their Executive Committees, to serve on the General Business Committee during the current meeting of the Association."

L. DUNCAN BULKLEY, M.D.
Secretary General Business Committee.

To the American Medical Association:—Recognizing their high responsibilities in regard to the sectional and scientific work of the Association, and the need of fostering it in every way possible, your General Business Committee gave long and very careful consideration to the resolution which was referred to it, making the regular time for the reception of the report of the Nominating Committee to be Thursday instead of Friday, as has been the custom. In view of the amendment which has been proposed, devoting the entire day of Thursday to sectional work, omitting the General Session entirely on that day, and for many other reasons, your Committee unanimously resolved that it was not expedient to change the customary date of receiving the report of the Nominating Committee.

On motion of Dr. Cochran, the report was adopted with the exception of those portions which introduce changes in the By-Laws, which must lie over for one year.

The following resolutions from the State delegation of New Jersey were read and adopted:

Resolved, That the American Medical Association renews and hereby confirms its long-standing allegiance to and defense of the letter and the spirit of the unamended Code of Ethics and etiquette of the American Medical Association; and further

Resolved, That any revision of that Code on the lines hitherto adopted or proposed, should be rejected by every regular practitioner of medicine as being inimical to the honor of the medical profession and subversive of the best interests of the people of the United States.

ALEX. MCALLISTER, Chairman State Delegates of New Jersey.

REPORT OF LIBRARIAN.

The following report of the Librarian was offered and accepted without being read in full:

To the President and Members of the American Medical Association:—Your Librarian begs leave to submit the following:

During the past year all the books, etc., constituting the library of the American Medical Association have been transferred from Washington, D. C., to the Newberry Library at Chicago, in accordance with the terms agreed upon at a former meeting. A certified copy of this agreement is appended hereto.

The report of the Librarian of the Newberry Library shows that our library consisted of 3,781 volumes, 3,708 pamphlets. In accordance with the terms of our contract, these will be classified, bound, shelved, and for the first time in the history of our Association, be accessible to the profession.

Now that a permanent home and proper care is assured for our books and journals, there is an abiding reason for continued and generous contributions from the members of the Association. Respectfully,

GEORGE W. WEBSTER, Librarian.

To the American Medical Association:—The main part of the Library of the American Medical Association, now in the Newberry Library, filled seventy-four cases. It was supplemented by the exchanges of the JOURNAL office for the period, 1890–94, and by the exchanges sent directly to Dr. Webster. A rough count of the volumes and pamphlets gives the following figures: volumes, 3,781; pamphlets, 3,708.

Perhaps 95 per cent. of the collection consists of periodicals, transactions and reports; of which the most of those

published before 1885 are bound. The arrangement of the unbound volumes is not completed; but the work has gone far enough to show that few, if any, of the sets are perfect.

The percentage of single volumes is comparatively small, most of them being old books. Among these are a number of works on cholera. Some of the volumes have been ruined by damp, while others have been mutilated by roughly tearing off the covers; on the whole, however, the books and pamphlets are in a good state of preservation.

Recent exchanges are represented to the number of 250. This includes nearly all the United States medical publications; some from Europe, and many from the Central and South American States. The medical and learned societies of Europe are well represented as are our own State societies. The transactions of these societies are particularly valuable for library purposes.

There is also a good showing of United States medical periodicals, printed early in the century and coming down as late as 1850.

The pamphlets consist largely of reprints from United States medical journals and of the publications of German universities, notably those of the University of Kiel. There are also some early files of insane hospital reports.

According to the terms of the arrangement entered into between the Association and the Trustees of the Newberry Library, the volumes and pamphlets will receive a mark showing the source of acquisition. It is hoped that the members of the Association will continue to manifest their interest in the Library by forwarding to it copies of their works.

J. V. CHENEY, Librarian.

THE NEWBERRY LIBRARY AGREEMENT.

It is hereby mutually agreed by the Trustees of the American Medical Association and the Trustees of the Newberry Library that the American Medical Association shall permanently deposit in the Newberry Library its entire collection of books and pamphlets now in the Smithsonian Institution at Washington, or elsewhere, and in consideration thereof the following arrangements are made and agreed upon, namely:

1. That the said books and pamphlets shall be treated by the Newberry Library in all respects as its own, and as it treats its own books, except that in labeling, stamping, or otherwise marking them, they shall, when received, be so marked as to show that they belong to the collection received from the American Medical Association; and the said Association shall never thereafter have the right to remove said collection of books or any part thereof from the custody and control of the Newberry Library.

2. That duplicates or other books may be exchanged or sold at the discretion of the Librarian or Trustees, but that such books received in exchange or purchased with the proceeds of sale shall be marked or stamped as above provided for.

3. That the American Medical Association shall hereafter continue to deposit in the Newberry Library all the books, journals, etc., donated or contributed to it from any and all sources; except those given to reviewers for writing the reviews, and such journals as are needed to keep complete files in the office of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. All such books, etc., shall be treated in all respects as hereinbefore provided concerning the collection at present existing.

4. That the Newberry Library shall defray the expense of transporting the aforesaid collection to the Newberry Library.

Dec. 5, 1894.

THE NEWBERRY LIBRARY,
By EDWARD S. ISHAM, First Vice-President.
Attest: R. B. MCCONNEL, Secretary.
GEO. W. WEBSTER, Librarian A. M. A., June, 1894,
A. GARCELON, President Board of Trustees.
Attest: JOHN B. HAMILTON, Secretary.

The following resolutions from the American Pharmaceutical Association were offered and adopted.

In response to the resolution sent from the American Medical Association, the American Pharmaceutical Association offer the following:

Resolved, That the American Pharmaceutical Association condemns the prescribing and dispensing of proprietary medicines; and while the necessity of protecting capital invested in the manufacture and marketing of galenical preparations is recognized, we protest against any system of protection which permits one manufacturer to retain the exclusive control of a pharmaceutic product indefinitely, and regard the law which permits it as opposed to true progress in pharmacy and medicine.

Resolved, That the working formula of every pharmaceutic preparation should be published, and a technically correct scientific name given it, so that it may appear in professional literature, find a place in the Pharmacopœia or National Formulary, and be free to all pharmacists to manufacture and sell.

Resolved, That physicians be particularly requested to consult the United States Pharmacopœia and National Formulary in prescribing galenical preparations, and that we request both of these works be made text-books in the medical colleges.

J. M. GOOD,
WILLIAM C. ALPERS.

THE SECRETARY read the following:

DECISION OF JUDICIAL COUNCIL.

May 9, 1895.

The papers referred to the Judicial Council concerning the Texas State Medical Association consist of a printed pamphlet severely reviewing the past action of the Texas Association, and a letter from the author, apparently, asking the Committee on Registration to suspend the registration of delegates from the Texas Association until a proper protest can be presented. But as no such protest accompanies the papers received by this council, there is nothing in form ready for the action of the Judicial Council of the American Medical Association.

JOHN B. ROBERTS, Secretary.

By order of Council.

DR. GIHON offered the following, which was adopted:

Resolved, That the cost of the necessary printing and distribution of circulars for the Rush Monument Committee shall be defrayed by the Association on vouchers certified by the Chairman and Secretary of that Committee.

DR. HERR, of Lancaster, Pa., offered the following, which was adopted:

WHEREAS, Many of our ablest and most honorable members have been Acting Assistant Surgeons in the service of the United States during the War of the Rebellion, occupying responsible positions and subject to the same rules of discipline as commissioned officers and enlisted men; it is the sense of this society that the Congress of the United States should, by enactment, place them where they honorably served, upon the same plane of distinction as commissioned officers of the same grade; therefore be it

Resolved, That this body recommend Congress to enact such legislation as will place all those who served as Acting Assistant Surgeons during the years from 1861 to 1865, and who were honorably dismissed, the same distinction as commissioned officers in the same grade of service.

The Association, on motion, adjourned to meet in Atlanta, Ga., the first Tuesday in May, 1896.

SELECTIONS.

Tuberculous Adenoid Vegetations of Naso-Pharynx.—M. Lermoyez (*Ann. des malad. de l'oreille, etc.*, 1894, No. 10) alludes to some experiences with adenoid growths in the naso-pharynx, which, on examination proved to be not lymphatic, but tuberculous in structure. In such cases the removal of the growths gave only a temporary relief; a return soon followed. In one case a rapid development of tubercle of the lungs followed the operation. The writer proposes in all cases where there may be a suspicion as to the tuberculous nature of the adenoid growths to forestall the operation by a histological examination of a test portion and to complete the operation finally by galvano-cautery in order to hinder the entrance of germs into the opened blood vessels. The subject is quite important, but the writer's material was so scanty that further investigations in this direction are earnestly desired.

A Case of Tubercular Meningitis, with Recovery.—(Freyhan in *Deutsche med. Wochenschrift.*) Existing opinions in general are against the possibility of recovery from tubercular meningitis since the brain is only in rare cases the sole point of infection, but a general miliary tuberculosis, as a rule, exists. So much the more interesting is the observation at the city hospital at Friedrichshain in Berlin of an instance of recovery, in which the tuberculous nature of the process was most infallibly shown. The diagnosis was proved by puncture of the spinal canal at the level of the second lumbar vertebra and by drawing 60 c.c. slightly turbid, light colored serum, in the sediment of which was found a scanty number of pus corpuscles and undoubted, deep red, tubercle bacilli, arranged like strings of pearls, whose presence was further assured by numerous control preparations. After the puncture the patient recovered so quickly and uninter-

ruptedly that after three weeks without fever he was able to leave his bed. This case is also instructive with regard to the differential diagnosis between tubercular and cerebro-spinal meningitis. The recovery of a case in which opinion has wavered between these two affections, usually tends to strengthen the diagnosis of cerebro-spinal meningitis. The result of a puncture in connection with the microscopic and bacteriologic investigations is destined to clear the point. Entirely aside from the therapeutic value of this method, it is certain we possess in it a diagnostic resource of the first rank in the differential diagnosis between tubercular and cerebro-spinal meningitis.—*Centralblatt für innere Medicin.*

Omphalectomy in Radical Operations for Umbilical Hernia.—Dr. L. Pernice, surgeon to the Deaconess' Hospital at Frankfort, relates in detail an operation on a very corpulent woman for a long-standing, irreducible, umbilical hernia as large as a child's head. The operation was undertaken on account of constipation, pain, and persistent vomiting. The incision was about 25 cm. long, and passed in a semicircle to the left of the umbilicus. A short incision passed to the right of the umbilicus and so completed an oval which was excised with the sac and the margins of the rectus muscle. The inflated intestines were replaced with great difficulty. Then, following Bruns' recommendation of the plan of Condamin, he attempted the suturing in three layers, found this impossible from the tension, and even with the single layer was forced to resort to silver wire, and to use many sutures. The patient did well; stool on the fifth day after calomel; no rise of temperature, except on the eleventh day (38.4 degrees C.), when four days had elapsed without stool. All sutures removed on the sixteenth day. On the eighteenth day sudden dyspnea and cyanosis and she died within fifteen minutes from pulmonary embolism.

"I would especially emphasize that I do not ascribe this death to the method of operating, but to an accident. Although a post-mortem was refused, the diagnosis of embolism seems sufficiently assured. The operation in itself is simple; excision of the umbilicus is easy; replacing of the intestines would not in most cases be hard; but the greatest difficulty in the operation lies in closing the wound. The Condamin method of suturing can not be recommended. On the strength of this one case, I feel compelled to regard the usefulness of this new operation as limited. While in Bruns' case the hernial opening admitted the tips of two fingers, in mine five or six could easily enter, hence it was at least three times as broad. After such an excision the edges of the wound were separated too far to be easily brought together. And when, moreover, the hernial sac has long contained many coils of intestines, and the abdominal cavity has become diminished in size, it will be seen that the difficulty of closing the wound is much increased after the hernial contents have been replaced."—*Centralblatt für Chirurgie.*

Snegirjoff Steam.—A new Hemostatic. Preliminary Report. (Clinical Lectures of Professor Zacharyn and the work in the clinic of the Faculty of Therapeutics of the Imperial Univ. of Moscow.) This work of the distinguished Moscow gynecologist deserves special attention. In 1893 he extirpated an echinococcus cyst of the liver which protruded from the left lobe with a base of four fingers breadth. Since the base of the tumor was very thick and he yet wished to remove the entire sac, he tried to divide the pedicle with the actual cautery, but failed completely in stopping the hemorrhage, until at last he filled the wound with gauze as a tampon. The woman recovered. He was convinced, as other surgeons have been, of the inadequacy of our means of hemostasis from the liver. Sutures cut through, matrass-sutures can not always be used, cautery is often insufficient, so that marpy scraps (Scotch gauze) become necessary. In this way there occurred to him another long known hemostatic.

Seven or eight years before, he had used steam as a cautery and hemostatic in gynecologic therapeutics. After a dilatation of the cervix and curetting, for instance, he passed into the uterus a catheter, perforated at the end, like a sieve, within which was a thin metal tube, connected with a steam boiler supply. The application of steam at about 100 degrees C., for a half to one minute was sufficient for cauterization and hemostasis and this was recognized by the discharge from the catheter of a dark-colored fluid, resembling strong bouillon in appearance. This operation is painless and the patient does not recognize the moment of application of the steam. What happens within the uterus? In the extirpated uterus, at an experimental trial, the mucous membrane immediately afterward appeared scalded, covered with a thin white pellicle. In cases where there was putrefaction, at once all odor disappeared; where the mucous membrane was painful, the pain was removed; if one adds the antisepsis accomplished by the steam, then its full significance is seen; cauterization, hemostasis, anesthetization and antisepsis. All this had long been known to him, but now he turned his special attention to the hemostatic action and conducted a series of experiments on animals with specially constructed instruments: 1, without any loss of blood portions of liver were removed, the animals surviving; similarly, parts of the spleen, the lung, the kidney, the brain; 2, hemorrhage from the cancellous tissue of bone was stopped. The marrow was scalded and reformation of true bone (?) resulted; 3, in a dog it was possible to remove a horn of the uterus without hemorrhage; 4, the femoral artery was severed diagonally or transversely without hemorrhage; 5, hemorrhage from wounds of muscles or skin ceased at once; 6, furthermore, primary union followed. The final experience was not only with animals, but also in operations on man, and even in laparotomies.

In 1893, he used steam in the Alexina Hospital in the following operations: 1, in five cases of resection of the knee-joint, without hemostatic forceps, without a single ligature; 2, in an amputation of the breast for cancer, also without a ligature; 3, in removal of cancerous, lipomatous or cavernous neoplasms of the skin; 4, in amputation of the cervix uteri; 5, in stopping hemorrhage from the pedicle after removal of fibroids; 6, in abscesses for disinfection and stimulation to cicatrization; 7, for hemorrhages from sinuses and fistula (especially in tuberculosis).

On the strength of this, Snegirjoff pronounces steam a powerful hemostatic and antiseptic. Sound as well as diseased tissues, and the organism *in toto* bore the action of steam vaporization well. Primary union was not prevented, the wounds of parenchymatous organs appeared smooth, even shining, at the site of removal of tumor. By way of illustration, Snegirjoff dictated a description of the examination of a dog subsequent to operation: in the region of the left kidney a piece of the left horn of the uterus, 2 cm. long, in which, as in a cyst, was a collection of fluid, was attached to the broad ligament. Over the steamed surface was a smooth cicatrix, pigmented in the center. The lumen of the left horn of the uterus, at the point of excision was firmly closed, in consequence of which the cyst-like collection of fluid resulted. The margin of the broad ligament, along the incision was smooth, even without noticeable cicatricial contraction. The peritoneum was smooth, moist, shining. No pathologic changes in the para-uterine or other pelvic cellular tissue. There were large blood vessels in the broad ligament of the remaining portion of the left horn of the uterus.

In view of this, the surgeon can without fear remove portions of parenchymatous organs. The far-reaching significance of the results thus made public is evident. If the statements are fully confirmed, the work of the active and vigorous Moscow college will bring about a revolution in the whole technique of operations. Steaming would have the greatest value in hemorrhage in laparotomy for extra-uterine pregnancy, in atony of the uterus, after injuries of the soft parts in delivery, after symphysiotomy, in rupture of the uterus, all the operations for cancer, etc.—*Centralblatt für Gynakologie.*

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On receipt of the subscription the weekly JOURNAL of the Association will be forwarded regularly.

Gentlemen already members of the Association should send their annual subscription to the Treasurer, or direct to the JOURNAL office.

All communications and manuscript of whatever character, intended for publication in the JOURNAL, should be addressed to the *Editor*, and all communications relative to the business of the JOURNAL, proof sheets returned, or in regard to subscriptions, should be addressed to THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 86 Fifth Avenue, Chicago.

SATURDAY, MAY 18, 1895.

THE BALTIMORE MEETING.

The forty-sixth annual meeting was characterized throughout by great harmony. The Section work has seldom been better managed, and the attendance was larger than the average. The ASSOCIATION, by an overwhelming vote, indefinitely postponed all proposed amendments to the Constitution and there will therefore be none of consequence to be voted upon at the Atlanta meeting.

The vote by which the Secretary and the Treasurer are required to be in attendance one day before the opening session, for the purpose of better organization of the registration, will save much annoyance to the members, and relieve the local committee of much of its burden.

The action of the Board of Trustees in regard to the advertising was the subject of much favorable remark. This action, which appears in detail in the report, was agreed upon at the Chicago meeting of the Board, but as two members were unable to be present at the Chicago meeting, the Board were not ready to report earlier than on Thursday. An attempt was made on Monday to compel them to report at once, and to have a special committee appointed to inquire into its nature, but the ASSOCIATION declined by a majority vote to appoint a committee, the effect of which would have been to create distrust. When the report was made, it was so clearly in the line desired by the mover of the resolution, DR. S. SOLIS-COHEN, of Philadelphia, that that gentleman himself, amidst thundering plaudits of the meeting, moved its adoption in an eloquent speech. This action of DR. COHEN at once proved the sincerity of his course, and the practical unanimity of all parties composing the ASSOCIATION. Now that the advertising question has been eliminated from further consideration, we sincerely trust that all may work the harder to sustain, support and improve the JOURNAL. It is due the Trustees to state publicly that the change finally adopted has been gradually going on, for the last year, and as fast as contracts have expired the formula has been required from advertisers of proprietary medicines. It will take some time to bring the remainder into line. The members will please to understand that those carried beyond this issue are only awaiting the expiration of the existing contract.

PRESIDENT MACLEAN still further added to his well-won laurels by the dignity and wisdom with which he performed his difficult duties. In the election of DR. R. BEVERLY COLE, of San Francisco, a tribute was paid to long and faithful service in the ASSOCIATION, recognition of a medical teacher of National reputation, a sanitarian of eminence, and a compliment to the profession of the Pacific coast.

The minutes of the general sessions, which we present in full in this issue, will, we feel sure, be of unusual interest, not only to those members who were present at the meeting, but as well to the larger body of our colleagues who were compelled to remain at home.

The social features of the meeting were quite sufficient to occupy all the time at the disposal of the members and the ladies by whom many were accompanied. Baltimore looked its best. The boulevards are fresher at this season than at any other; the grass and the leaves a more vivid green; the flowering shrubs, the wisteria clusters with their delicate heliotrope coloring, everywhere met the eye, and the fragrance of lilacs pervaded the air. Nowhere in America, except in Washington, does one see cleaner streets than in Baltimore, and if certain sanitarians do occasionally take a fling at the policy which prevents the construction of sewers, it must be admitted that the month of May in Baltimore is a very charming month indeed.

The teachers at the Johns Hopkins Hospital had every opportunity to show to good advantage the high class work they are doing, and that they made full use of the opportunity thus offered was as pleasing to the ASSOCIATION as it was creditable to themselves.

In conclusion, it may be said that those elements which go to make up the *tout ensemble* of a successful meeting of our great ASSOCIATION, viz., harmony, science and social pleasure, the forty-sixth annual meeting possessed in an eminent degree.

Blank Applications for membership in the ASSOCIATION at the JOURNAL office.

THE WORK OF THE PRINCIPAL SECTIONS.

This number of the JOURNAL is preëminently *the* ASSOCIATION number, for we have a verbatim report of the discussions and debates in the general sessions, and as well the resolutions passed therein. The bare report of the final action of the body, without a statement of the debate which gave direction, is sometimes unintelligible to those who were not present.

The work of the Sections was in general characterized by thoroughness and enthusiasm. We append a brief review:

PRACTICE OF MEDICINE.

An unusually large number of papers were read in the Section on Practice of Medicine. The topics were well selected and the authors gave more than usual care to their preparation. We have a pleasure in store for our readers who were not present at the meeting, in the perusal of the papers of this Section.

SURGERY AND ANATOMY.

The work of the Surgical Section comprised the presentation of forty papers. Of these papers all but ten were read. The latter were read by title, and will be published in the proceedings of the Section. Whereas the range of subjects covered the entire field of practical surgery, a number of special subjects were extensively considered. Among those of special interest were, "The Surgery of the Kidney and Ureters," and "Modern Methods of Cystoscopic Examinations of the deep Urethra and Bladder." Abdominal surgery was further considered in papers and discussions upon, "Appendicitis," "Intestinal Obstruction," and "Surgery of the Gall-Bladder." To accomplish the reading of all the papers, the Chairman of the Section felt it incumbent without favoritism to enforce the twenty minute rule as to the reading of papers, and the five minute rule for the discussions. The good judgment of the Section at large was amply illustrated in discussing particularly those questions which were of paramount interest, and passing, without comment, papers of less general interest and importance. Altogether, the work of the Section was fully equal to the best efforts in the same direction of previous years. If any exception could be taken to this work, with the view of improving Section work for the future, it would be in the number of the papers read. As the Section work is now constituted, the Chairman of the Section is not empowered to refuse volunteer papers. The time must come when all papers will be presented to a proper committee and deemed worthy of a place upon the program before they can be submitted to the Section by their authors. J. R.

OBSTETRICS AND DISEASES OF WOMEN.

The work of the Gynecologic Section was satisfactory to a high degree. As will be seen from the reports, the papers presented were of an unusually high order, both as to subject matter and manner of treatment. The discussions were spirited and were led by men qualified to speak with weight upon the points at issue.

The attendance at each session was large and interested, the only drawback to the enjoyment of the meetings being the difficulty of hearing speakers in so large an auditorium, the accoustic properties of which were bad. Withal, the Chairman of the Section, DR. FRANKLIN H. MARTIN, is to be congratulated upon the unqualified success of the department over which he presided. The Chairman-elect of this Section is DR. JOSEPH TABOR JOHNSON, of Washington, D. C. H. P. N.

OPHTHALMOLOGY.

The sessions of the Section on Ophthalmology brought together probably the largest number of working ophthalmologists that have ever assembled in America. The restriction of papers to ten minutes, and of remarks in discussion to five minutes for each speaker, was noted to be more effectual in keeping out matter lacking general interest, and in holding the speakers to the point under discussion, than any other means that have been tried.

In arranging the work of this Section all the papers on the same or related topics had been carefully grouped together; and time had been provided for their discussion, and speakers invited to open the discussions. The result was not only that large numbers came to the meeting to attend this Section, but that they closely followed its sittings up to the last day of the meeting.

The series of papers on operations on the ocular muscles; and other methods of treating muscular anomalies; on plastic operations about the eye; and on astigmatism, with the discussions they elicited, will long be remembered by those present. What was felt to be the most serious defect in the program was the arrangement of receptions on the evening of the Section dinner. This annual dinner has become a highly appreciated occasion of reunion; and the feeling in this Section is very strong that in arranging for future meetings one evening, preferably the second, should be devoted entirely to Section dinners. E. J.

NEUROLOGY AND MEDICAL JURISPRUDENCE.

The Section on Neurology and Medical Jurisprudence at the Baltimore meeting, had the largest attendance and the greatest number of scientific papers of any previous meeting of the Section. The average attendance exceeded that of any other Section of the ASSOCIATION.

The scientific work was arranged principally in three symposia, to-wit: hypnotism, electricity and epilepsy, and about a dozen papers were read on miscellaneous topics on neurology. The discussions were unusually good, and participated in by some of the ablest neurologists in America. D. R. B.

STATE MEDICINE.

The Section on State Medicine had an unusually large attendance. There were thirty-eight papers on the program, twenty-two of which were read. The symposium on alcohol by members of the American Medical Temperance Association was one of the distinguishing features, and the character of the papers was of high scientific value. The appointment of a special commission to investigate the alcohol question will doubtless be hastened by these preliminary discussions in the Section. The Section, as will be seen elsewhere, loyally adhered to the ASSOCIATION movement for the establishment of a Department of Public Health.

DISEASES OF CHILDREN.

This Section, which has languished for the last two years, sprung into new life under the active efforts of its Chairman, and the meeting this year was the largest ever held. In scientific value the papers were fully equal to those of the Detroit meeting, which up to this time has been supposed to be its best meeting.

LARYNGOLOGY AND OTOLOGY.

The work of this Section exhibits the same general advance in interest that was manifest last year. The attendance was more than three times that at San Francisco, and several of the leaders who of late have been conspicuous by their absence from the ASSOCIATION meetings, were present and warmly welcomed.

CONCENTRATED FOOD AND ARMY RATIONS.

A ration, in the phraseology of Army Regulations, is the "established daily allowance of food for one man." The regular ration of the United States Army is accepted by all as liberal and satisfactory; but as it may not always be possible to issue it during active service, the question of an emergency ration has been under discussion, for some time back, in Army circles. Recently a practical turn has been given to the subject which promises to yield results that will be of value, not only to the soldier, but to the country at large. GENERAL MORGAN, Commissary General of Subsistence, has invited the attention of the Secretary of War to the want in our service of a special ration to be carried by each soldier and used only when the regular issue can not be made. Such a ration should combine the properties of wholesomeness, palatability, proper nutritive value and portability, and should in addition possess good keeping qualities. MAJOR WOODRUFF, of the Commissary General's office, has elaborated a ration of biscuit and soup tablets, the latter containing the fiber of the meat, which is regarded as furnishing the needful nutritive principles in a minimum of bulk and weight; but before recommending the adoption of this, GENERAL MORGAN desired to have the coöperation of line and medical officers in considering the question and determining the selection. He therefore suggested that in each of the military departments a board, of one subsistence, one medical and three line officers, be convened to consider and recommend a proper ration for troops operating in emergencies, and that each of these boards give special consideration to the following points: "1, the component parts of the ration selected with regard to wholesomeness, nutritive value and portability; 2, acceptability to taste; 3, keeping qualities; 4, weight, and the kind, size and form of package for convenience of use and of carriage on the person; 5, directions for use; 6, number of rations to be carried by the soldier, and 7, whether these are to be carried at all times as a part of the equipment or to be issued only as required by the probable emergency. If after the reports have been received by the commanding general it should be found that there are material differences of opinion it is suggested that a board of officers be convened at Washington to reconcile these differences if practicable. I also recommend that a sum not exceeding $100 [and this is the practical part of the recommendation] from subsistence funds be assigned to each board to meet the expenses of materials and preparations thereof in the experiments necessary to be made by it." The Secretary of War has approved the General's recommendation and these boards will speedily be organized.

The emergency ration of foreign armies consists generally of biscuit and meats, pemmican, sausage, stews, soups, etc., put up in hermetically sealed tins and prepared usually at private factories. Of these the pemmican is regarded as the highest concentration, four ounces being considered equivalent to one pound of meat. The meat biscuits, 25 per cent meat and 75 per cent. flour, formerly used in the British service were found to keep very well; but as the baking at about 500 degrees Fah. was believed to injure the nutritive value of the meat, their use was discontinued. For some years preserved meats from Australia, Argentina and the United States were used by the British government. Chicago canned beef was regarded by the medical officers of the Netley Medical School as having more than twice the nutritive value of an equal weight of good roast beef. This canned beef with its high nutritive value costs in the United States less per pound than fresh meat, with its large percentage of refuse and its liability to become tainted. Students of domestic economy should make note of this important fact. Germany established canneries as long ago as 1870, and is now able to turn out daily nearly half a million of meat rations. Up to this time France has depended on the United States and Australia for a canned meat ration; but a recent Army Commission has reported against any further con-

tracts for these meats, on the ground that the foreign manufacturers before canning the meat, extract from it a concentrated bouillon from which they make Liebig's extract and solidified soups. They are thus able to underbid French manufacturers who put into their cans every particle of the nutritive elements of the meat. The Commission therefore urges an appropriation for the establishment of governmental canneries.

Beef extracts are not used as emergency rations by any of the governments. The meat fiber is present in all; but in most of the samples, particularly in the patent or cooked rations of various makers, on trial by military authorities, there is an unnecessary amount of water. In some this non-essential water constitutes more than half of the bulk. In the form of biscuit, farinaceous foods appear to approach as near as possible to the condition of water free food. It is therefore mainly to the elaboration of the meat ration that the attention of the boards to be convened at the request of GENERAL MORGAN, will no doubt be directed,

PERILS OF THE LABORATORY.

It has been so, since the world began, that the pathologist takes his life in his hand. There are, we believe, far fewer dissecting-room wounds now than before the Listerian era, but the grounds of peril have not been removed; they have been shifted to the laboratory. When one considers the vast army of laboratory workers, however, and the minute and almost unintermittent toil given by many of such workers, is it not strange that more frequent misadventures by infection have not been reported? The rules of all well-constituted laboratories are rigid, and recognized to be in the line of the self-preservation of the workers. These are all very well and yet they doubtless do not, and can not, cover all the points of peril coming from atmospheric infection; take, for example, the ærial carriage of the tuberculous bacillus, in the form of floating floor-dust, after the breakage or upsetting of a tuberculosis culture.

The death of DR. JOHN M. BYRON, of New York Quarantine Station, has recently been reported, and is believed to be an instance of the fatal results of laboratory infection by tuberculosis. His death at the early age of 35 years means the untimely removal from the ranks of the profession of an exemplary scientist, a man who has already achieved a more than local reputation.

DR. JOHN MANUEL BYRON was a Peruvian by birth and a graduate from the University of Lima. After taking his degree he went to Europe and spent several years in study, making a specialty of the diseases originating in bacteria. He visited Paris and Berlin, attended medical lectures, and pursued original investigations in the hospitals. He then went to Naples, and settled down there to practice. He was proficient in five languages—inclusive of his native tongue, the Spanish. About seven years ago, he took up his residence in New York. He never practiced very much, preferring the life of the laboratory. He was appointed chief of the bacteriologic department of the Loomis Laboratory, and lecturer in that branch in the University Medical College. In addition to this work he was connected with the New York Dispensary. He did not court outside practice, but used all his leisure in the study of his specialty in the Loomis Laboratory, where he gave special attention to the bacterial study of malarial fevers and leprosy. During the cholera scares of 1892 and 1893, he was made the pathologist to the Swinburne Island Hospital, and was isolated there until the cases were all closed by recovery or death. Health Officer of the Port, DR. DOTY, had only recently appointed him to a similar but larger line of work, as the bacteriologist of the quarantine establishment of New York Harbor. Concerning his own experience in regard to the onset of tuberculosis, he is reported to have expressed himself as follows:

"I have been making cultures of disease germs for twelve years, and I suppose familiarity with them made me careless, just as a surgeon frequently cuts himself with his knife. You know it was our custom to get the sputum of patients in the hospitals suffering from consumption, and to find this bacteria. These are generally confined in bottles or tubes when not in use, but when we want to put them under the microscope they are spread out on glass.

"One is practically safe as long as they are wet, but when they become dry they fill the air as so much dust, and you can not help but inhale them. It is in this way, you know, that consumption spreads.

"I was somewhat run down last February—in fact, I had never become very strong after my exposure during the cholera scare. I was doing some experimenting with tuberculosis bacteria at the time, and I suppose that some of them had been allowed to dry—how, I don't know—but it may be that some were brushed to the floor during our researches, or that the bottles were not thoroughly sterilized, or in any of the thousand and one ways in which carelessness may exhibit itself."

ON THE RIGHT TRACK.

The JOURNAL hastens to seize the present promise—before it fades away fruitless—that the opponents of oleomargarine are about to fight that product on legitimate grounds. Bills are pending in sundry State Legislatures to forbid the addition of coloring matter to oleomargarine or any of its variants whereby it may be butter in appearance—"the same with intent to deceive."

This is laudable and proper. Every honest citizen who hates sham and fraud will join the JOURNAL in applauding such a measure. Let us have our oleomargarine in its pristine purity, like the pearl from which its name is borrowed. Let us have no sailing

under false colors. Nor will we stop to inquire too closely into the motives which inspire this sudden access of virtue. We will take the statement at its face value—that these bills are intended to protect the innocent consumer who "puts the bogus butter on his bread in a restaurant and eats it in the belief that it is genuine golden butter of the kine." There are thousands of persons who would not eat oleomargarine if they knew it, they say; and if it were left as white as it is before the coloring matter is introduced, these particular persons would be enabled to detect the imitation when it was offered them.

But while thus congratulating the guileless dairyman on this new departure, the JOURNAL begs to offer an amendment to all and sundry of these bills, to-wit: that the addition, not alone of coloring matter in the form of carrots, annatto, turmeric, etc., be forbidden the cow butter-makers, but also the use of "oleo" and various other "dopes" in dairy products generally, sold under the guise of "creamery butter," "pure country butter," etc. If these gentry will persist in hampering the sale and use of a wholesome and palatable cheap butter substitute, let them put their own wares under the same restrictions. The average oleomargarine of commerce is every way preferable to the average dairy butter at equal prices, as every hospital administration well knows. By all means compel the sale of the substitute under its true name, uncolored and without other sophistication, but let the dairymen come into court with clean hands while demanding this, and subject the original to the same requirements.

A FOUR YEARS' COURSE REQUIRED.

The American Medical College Association, in a well-attended meeting, by an overwhelming vote sustained the action taken at San Francisco, and permanently fixed the minimum requirements for graduation at four years of instruction in the medical college, the course each year not to be less than six months. Immediately after this action the colleges in Louisville not already belonging to the Association signed the constitution and became members. This insures the coöperation of the larger medical colleges of the Southern States, and will doubtless be followed before long by the other Southern colleges.

A proposition was received from some of the representatives of the Southern Medical College Association to the effect that if they would be allowed two years in which to come up to the four years' course, they would apply at once for membership. The difficulties under which these schools would labor in an attempt to adopt the four years' course at once were fully set forth, and the Association appreciated the progressive and friendly spirit in which the proposition was made; but it did not seem practicable to provide for two grades of colleges in the Association; however, a resolution was unanimously passed that hereafter the representatives of the Southern colleges be invited to the annual meetings of the Association as guests. No changes were made in the present rules of the College Association.

The officers elected for the ensuing year were: President, DR. WILLIAM OSLER, of Baltimore; Vice-Presidents, DRS. J. M. BODINE, of Louisville, and D. W. GRAHAM, of Chicago; Secretary and Treasurer, DR. BAYARD HOLMES, of Chicago; Judicial Council, DRS. D. S. REYNOLDS, of Louisville, W. H. PANCOAST, of Philadelphia, and VICTOR C. VAUGHN, of Ann Arbor, Mich.

ASSOCIATION OF AMERICAN MEDICAL EDITORS.

The American Medical Editors held their annual dinner, after some tribulation owing to some delays by train, and misunderstanding of the exact place and time of the banquet. The local committee-man, DR. CANFIELD, was in no way to blame and did his best to make matters agreeable to all concerned.

At the business meeting on Wednesday appropriate reference was made to the loss the Association had sustained by the death of their late colleagues DR. F. L. SIM, of the *Memphis Medical Monthly* and DR. E. S. ELDER, of the *Indiana Medical Journal*.

Steps were taken in the direction of better organization, and DR. GEORGE M. GOULD, of the Philadelphia *Medical News*, was elected President, DR. OHMANN-DUMESNIL, of the St. Louis *Atlas of Dermatology*, Vice-President, and DR. H. BERT ELLIS, of the *Southern California Practitioner*, Secretary.

Next year it is proposed to make more prominent the literary feature of the meeting, and, to obviate the bad effects of delayed trains, the dinner will be held on Tuesday evening instead of Monday as heretofore.

PUBLIC HEALTH.

Immunity against Diphtheria.—Ehrlich and Behring have determined that one-fourth of a curative dose of antitoxic serum is sufficient to secure immunity. Among ten thousand persons thus treated, only ten suffered from the disease although it was prevailing extensively. If the injection is made toward the end of the incubation period it may not prevent the disease, but the attack will be greatly modified. The larger the dose the longer the protection. The antitoxin is gradually excreted by the kidneys. When it has been entirely removed from the system the immunity ceases. The injection of several small doses at intervals is more effective in establishing immunity than a single large dose.

Diphtheria Antitoxin by Electricity.—Dr. Nencki, of St. Petersburg, has succeeded in producing diphtheria antitoxin by means of electricity. His method is the following: producing by cultivation, in the ordinary way, a very virulent diphtheritic broth, he passes through this solution a continuous current of electricity from 100 to 200 milliampères for eighteen hours. The broth thus treated was found to be

capable of curing a rabbit of diphtheria which had been inoculated with the disease eighteen hours before.[1]

Sulphur Fumigation in Malarial Fever.—M. d'Abbadie, the celebrated French explorer of Abyssinia, recently reminded the French Academy of Sciences that in 1882 he had made known the belief entertained by the natives of that country that daily fumigation of the naked body by sulphur, prevents intoxication by the pernicious and intermittent fevers of the deadly lowlands of the torrid zone. M. d'Abbadie recommended this to M. Colin on his geodetic expedition to Madagascar, but he only carried it out once on embarking at Tamatave, and he has now returned to France suffering from fever and fatigued by a long course of quinin. In concluding, M. d'Abbadie expressed the hope that this method will not be lost sight of in the French military expeditions to Madagascar.[2]

A Study of Dengue.—Marich reports his personal observations on the epidemic which visited Smyrna during the summer of 1889. This epidemic made its appearance toward the middle of June in the Jewish quarter, which on account of poverty, overcrowding and unhygienic surroundings furnished most of the victims. The dengue then successively invaded other parts of the city; neither sex, age or race were exempt, and four-fifths of the populace were attacked. The author describes these phases or periods: first, febrile access with intermediate apyrexia; second, febrile access, accompanied or followed by a true eruption; critical manifestations, desquamation and convalescence. Treatment is by ice, dieting, diaphoretic and diuretic drinks, antipyrin and quinin; during convalescence, arsenic and iron. Hydrotherapy is always efficacious. Usually in order to thoroughly recover, the patients must resort to the pure air of the country.[3]

Yellow-Fever Scare.—A Washington dispatch announces that in accordance with the recommendation of Surgeon-General Wyman, U. S. Marine-Hospital Service, the Acting Secretary of the Treasury Department has telegraphed to the Collector of Customs at Shieldsboro, Miss., to require all vessels from infected districts to repair at once to the Ship Island, Miss., quarantine station for disinfection. This action supersedes the State quarantine laws, the danger of the introduction of yellow fever from Havana being considered such that prompt and vigorous measures are deemed necessary, and it being feared that State authorities have not the facilities at hand to act promptly. Vessels will not be allowed to leave the Ship Island quarantine station without having a pratique signed by the United States quarantine officers. It is also announced that Surgeon-General Wyman will remain in the South until all the necessary measures for inspection of vessels from infected districts are put into operation. Fortunately, the "cold wave" will give ample time for these preparations before the "danger line" of 70 degrees mean temperature is reached.

Dr. Dana on the Bicycle.—The venerable dean of the American newspaper press, Charles Anderson Dana, LL.D., thus discourseth—*experto crede*—on the pleasure and the hygiene of the bicycle: "Not less pleasing than the sight of the young women and young men on their bicycles is the sight of the old chaps. Lots of graybeards can be seen along the up-town avenues wheeling at a speed that must be admired. Two or three of them challenged a squad of their juniors to a race yesterday, and beat them badly, beat even the energetic damsels who joined in the race. They sat erect, got a good grip, and worked their thews from the finger tips to the shoulder blades, from the big toe to the ilium, and even, it seemed, up to the ribs. A determined old chap on a bicycle can often give points to the youngsters. A good time for bicycling at this season of the year is the early morning, as early, perhaps, as 4 o'clock, when the air is cool and the weather fair. One may start at this hour, or at 5, after a solid sleep of eight or nine hours, and after taking a cup of coffee, or a tumbler of hot water, with a crust of bread or a hard ship-cracker, or, better still, a half of one of those little round, hard, and crisp crackers. It is best not to take too long a run then—well, say a half hour's run; for the business of the day must be attended to, and one should not waste his strength before beginning it. It is far better and healthier for a bicycler to go out soon after dawn than at night, when it is dark."

Cerebro-Spinal Fever—Not American Food.—What was at first reported to be wholesale poisoning from the use of American canned foods among French and German soldiery has now been determined to be outbreaks of cerebro-spinal fever—epidemic cerebro-spinal meningitis of Stillé,—due to a common cause in the barracks of both armies, to-wit: insanitary conditions, defective drainage, etc. The newspapers call it "barrack tetanus or lockjaw." It appeared with serious mortality some time ago at Munich, and was only eradicated by removing the troops from barracks to camps. It has been violent at Vitry and in several barracks in Alsace-Lorraine. The symptoms are described as beginning with stiffness at the nape of the neck, then stiffening of the legs and arms, and usually an agonizing death within twenty-four hours. Seventeen soldiers in one regiment died at Vitry last week.

Prominence for Sanitary Legislation.—When the English House of Commons recently re-assembled under the new Speaker, the first public business transacted was to pass Mr. Asquith's Factories and Workshops Bill without a division, but after what is described as "a long, practical and conciliatory debate." The bill aims at securing the observance in workshops of the sanitary laws to prevent overcrowding and unwholesome atmosphere; it enforces judicious precautions in the management and cleaning of machinery; limits the amount of over-time that is permissible in the case of women and children; prohibits the establishment of underground bakehouses, and enforces sanitary regulations on laundries carried on for gain. The debate on the measure involved the discussion of an immense amount of detail and of the many members who spoke no one absolutely opposed the bill, but every one recommended modifications. The JOURNAL looks forward with unabated hope to the time when it may chronicle similar action by an American Congress. *Let us have a Department of Public Health.*

Typhoid Fever at Stamford, Conn.—Three deaths have recently occurred at this place from alleged "milk typhoid." One of the worst epidemics—or prevalences—that have visited Connecticut began there three weeks ago. One entire family of seven were sick at the same time. The city authorities have an investigation under way, looking to the prosecution of the milkman, accused of adulteration, along whose route nearly all the cases have been located. The sale of milk by that dealer has been interdicted by the local Board of Health. Dr. Smith, of the State Board of Health, who has been there all the week, reported, as a result of his examination of several samples of water taken from wells in West Waterside, where the milkman lives, that the water is unfit for drinking purposes and dangerous to use. Acting upon these reports Commodore J. D. Smith, who is a member of the Board of Common Council, offered a resolution, which was immediately passed, that these wells be filled up.

[1] Modern Medicine.
[2] Gaz. Med. del'Algerie.
[3] These de Paris.

The New York City Department of Health and its Non-Medical Presidency.—A bill has passed both houses of the New York Legislature, the object of which is to remove the legal restrictions formerly existing against the appointment of a medical man as the president of that department. The bill if signed by the Governor, will operate permissively in that direction. A physician *may* hereafter be put in the honorable position from which all physicians have been excluded for many years; the bill is not mandatory. During all the time that Tammany Hall held sway and influence with the successive Legislatures there was no chance for the successful introduction of such a measure. It is fully expected that the Governor will approve the bill, and it is altogether desirable that a physician shall soon be given an opportunity to show how well he can occupy the place formerly deemed the suitable billet for plumbers, stock brokers, leather merchants or chemists. It may confidently be predicted that if the bill shall go into operation, it will be many long years before the excluding act will again go upon the statute books.

Sanitary Reports to the Supervising Surgeon-General, Marine-Hospital Service:

SMALLPOX—UNITED STATES.

Indiana: Terre Haute, April 24 to May 6, 1 case, 1 death; Evansville, April 24 to May 6, 2 cases; Indianapolis, April 24 to May 6, 1 case; Tell City, April 24 to May 6, 1 death.

Kentucky: Lexington, April 1 to May 8, 14 cases; Ashland, April 1 to May 8, 6 cases; Princeton, April 1 to May 8, 10 cases: Paducah, April 1 to May 8, 30 cases; Ky. Union Junction, April 1 to May 8, 3 cases; Winchester, April 1 to May 8, 1 case; Williamstown, April 1 to May 8, 1 case; High Bridge, April 1 to May 8, 2 cases: Maysville, April 1 to May 8, 1 case; Louisville, April 1 to May 8, 5 cases, 1 death; Henderson, April 1 to May 8, 1 case.

Louisiana: New Orleans, April 26 to May 4, 28 cases, 2 deaths.

Michigan: Smallpox reported present during the week ended May 4 at Brownstown Twp. and Detroit.

Ohio: Cincinnati, April 18 to May 7, 24 cases, 7 deaths; Cincinnati, May 3 to 10, 10 cases, 2 deaths; Cleveland, May 3 to 10, 8 cases.

Pennsylvania: Philadelphia, April 9 to May 7, 20 cases, 1 death.

Tennessee: Memphis, May 9 to 10, 2 cases.

Wisconsin: April 22 to May 6, Plover, 2 cases; De Pere City, 3 cases, 1 death; Lawrence Twp., 8 cases, 1 death; Rockland Twp., 1 case; Cedarburg, 4 cases; Greenfield Twp., 2 cases, 2 deaths; Milwaukee, 10 cases, 3 deaths.

Virginia: Staunton and vicinity, to May 11, 19 cases, 5 deaths; Middlebrook, to May 11, 1 case.

SMALLPOX—FOREIGN.

Arabia: Aden, March 9 to 16, 4 cases, 1 death.
Austria: Buda-Pesth, April 15 to 22, 1 case.
Bohemia: Prague, April 13 to 20, 3 cases.
China: Hong Kong, March 16 to 23, 1 death.
Cuba: Havana, April 18 to May 2, 16 deaths.
Egypt: Cairo, March 26 to April 8, 7 deaths; Alexandria, March 26 to April 8, 2 deaths.
England: Liverpool, April 20 to 27, 1 case; London, April 20 to 27, 12 cases.
Gibraltar: Gibraltar, April 21 to 28, 1 case.
Holland: Rotterdam, April 20 to 27, 7 cases, 1 death.
India: Calcutta, March 23 to 30, 200 deaths.
Ireland: Dublin, April 20 to 27, 14 cases, 1 death.
Italy, Marsala, April 13 to 20, 1 death; Naples, April 19 to 26, 2 cases, 2 deaths.
Russia: Batoum, April 10 to 17, 1 death; Moscow, April 6 to 20, 1 death; Odessa, April 8 to 20, 3 cases; Warsaw, March 29 to April 6, 1 death; Warsaw, April 13 to 20, 1 death; St. Petersburg, April 13 to 20, 3 cases, 2 deaths.
Spain: Barcelona, February 1 to 28, 16 deaths.
Scotland: Glasgow, April 20 to 27, 1 death.

CHOLERA.

India: Calcutta, March 23 to 30, 133 deaths.
Russia: Volhynia, February 24 to March 16, 125 cases, 48 deaths; Podolia, March 3 to 23, 16 cases, 9 deaths.

YELLOW FEVER.

Cuba: Havana, April 18 to May 2, 6 cases, 2 deaths; Santiago de Cuba, April 15 to 30, 11 deaths.

The following letter, relative to the introduction of cholera into Japan, has been received from Dr. Stuart Eldridge, late Sanitary Inspector U. S. M.-H. S., at Yokohama:

YOKAHAMA, JAPAN, April 19, 1895.

Sir:—My last report was written March 19, and inclosed copies of telegrams announcing the occurrence of a few, chiefly isolated, cases of cholera at the Japanese ports in closest communication with the seat of war, viz., Ujina, Mafi, etc., all in southern Japan, some five hundred miles from Yokohama. Since the date mentioned, importations of cholera to the same region have been of frequent occurrence, scarcely a transport or man-of-war arriving, either from Manchuria or the Pescadores, without one or more cases of cholera on board. The very active measures taken by the authorities have, however, so far, proved successful in controlling the spread of the disease, which has nowhere in Japan assumed epidemic form. There was, last night, a disquieting report that single cases have appeared in Matsugania on the large island of Kinshin, at some distance from the naval and military stations, and in the great central city of Osaka. The proof of the genuineness of these cases is, however, not yet complete.

The situation, is, unquestionably, a grave one. Peace has been concluded by the plenipotentiaries, and, if ratified, will speedily be followed by the return of the armies and large bodies of coolies, employed in transportation, who, in dispersing to their homes will almost inevitably distribute disease widely throughout the country. The government will bravely grapple with the danger, but conditions more favorable for the introduction and propagation of epidemic disease can scarcely be imagined.

Inspection of all vessels coming from suspected localities, domestic and foreign, to be followed by the necessary quarantine, where required, is already in force throughout Japan. In this connection I may say that a new quarantine station for Yokohama and Tokyo, has just been completed at Nagahama, some ten miles below this port, which in completeness of equipment, convenience, and in its provision for the comfort and welfare of those detained for observation or treatment is probably unsurpassed in any country. The control of this station is vested in the hands of my English colleague, Dr. E. Wheeler, and myself, as senior Health Officer of the port of Yokohama, a large and competent staff assisting us.

After consultation with the Consul-General, Mr. N. W. McIvor, it has been decided to enforce the most rigid inspection of all ships bound for the United States, the personal examination to include all on board, irrespective of class of passage or of the point at which they have entered the ship.

NECROLOGY.

STEPHEN E. FULLER, M.D., of Brooklyn, died May 2, aged 58 years, from chronic malarial hepatitis with renal complications. He was an alumnus of the New York College of Physicians and Surgeons, of the year 1858, and had been twenty-eight years a resident of Brooklyn. He was a member of the New York Academy of Medicine, of the King's County Medical Society, and a long-time member of the staff of the Brooklyn Central Dispensary, latterly in the position of consulting surgeon. He was a gentleman of force and refinement of character, which with other traits, contributed to give him the successful position held in his calling and in social life.

HARLAN P. ALLEN, M.D., of Columbus, Ohio, a member of the AMERICAN MEDICAL ASSOCIATION since 1888, died at the Roosevelt Hospital, New York City, May 2. He had been suffering for some time from appendicitis, and went to New York on the Saturday preceding his death to put himself under the care of Dr. McBurney. An operation was undergone soon afterward, at the hospital named above, and Dr. Allen appeared to be improving until Thursday. At that

time a sudden change for the worse took place and the fatal event could not be stayed. Dr. Allen was a graduate of the College of Physicians and Surgeons, in 1879. He was a member of the local medical Societies, of the Central Ohio, and the Ohio State societies. He was Professor of Ophthalmology and Otology in the Columbus Medical College.

SIR GEORGE BUCHANAN, M.D., of London, died May 6, 1895, of cardiac disease. He was one of the first half-dozen of British sanitarians, of the generation now passing, who have placed themselves in the rare category of sanitary statesmen. The greater number of his colleagues have gone over to the majority before him, only Sir John Simon—of that small house of peers—now surviving. Dr. Buchanan is best known in this country by reason of his researches—cotemporaneous with those of our Bostonian Bowditch—as to the influence of soil-moisture in the production of pulmonary tuberculosis, and by his typhus essay in Reynolds' "System of Medicine." Sir George was born in London about sixty-five years ago and was educated at University College, London, where he obtained the degrees of B.A. and M.D. He held many offices in British medical societies, and was employed by the Privy Council as an expert in infectious diseases. From 1870 to 1882 he was medical officer of the Local Government Board. Among his published works are many official reports and his "Lettsonian Lectures on the Lung Diseases of Children."

GENERAL CHARLES SUTHERLAND, U. S. A., at Washington, D. C., May 10. He was born in Philadelphia May 29, 1830, was appointed assistant surgeon Aug. 5, 1852, and was promoted captain Aug. 5, 1857. He served with the troops in the field in several important battles and was appointed surgeon-general in March, 1861. He was stationed at Ft. Warren, Mass., until June, 1862, when he joined the armies in the West in the field. He established nine general hospitals, with large supply depots at Columbus, Ohio, and Memphis, Tenn. He was brevetted lieutenant-colonel March 13, 1865, for "faithful and meritorious services during the war." He was promoted lieutenant-colonel and assistant medical purveyor July 28, 1866, and remained on duty in Washington to June, 1870; then was a member of the retiring board in New York City from October, 1870, to March, 1871. Colonel Sutherland was appointed brigadier-general and surgeon-general Dec. 23, 1890, taking station at Washington City.

J. D. ROBINSON, M.D., of Wooster, Ohio, May 9, aged 75. He is said to have performed the first amputation in the War of the Rebellion.——Joseph C. Norwood, M.D., formerly Professor of Physics in the Missouri State University, died at Columbia, Mo., May 5.——F. W. Jaeger, M.D., of Toledo, Ohio, May 9, aged 59.——W. N. Green, M.D., of Webster City, Iowa, May 9. He was surgeon for the Chicago & Northwestern and Illinois Central in that locality.——P. M. Bigney, M.D., of Cincinnati, Ohio, May 8, aged 61.——John A. Byers, M.D., of Springhill, N. S., May 5, aged 40.——Benjamin A. Turner, Superintendent of the Maryland Institution for Feeble-minded Children, at Owings Mills, May 7, aged 35.

MISCELLANY.

Nut Galls in the Treatment of Burns.—Grose advocates the application of an ointment composed of one part of finely powdered nut galls to eight of vaselin in extensive burns. He claims it is an excellent means for rapidly diminishing the excessive secretion from the wound and of deodorizing it, as well as of lessening the exuberant granulations and their consecutive contraction. The use of this ointment, in combination with somewhat energetic compression by the dressing, gives as good results as those from nitrate of silver.[1]

To Remove Nitrate of Silver Stains.—Hahn recommends the following mixture for this purpose: bichlorid of mercury, chlorate of ammonia, each 5 grams, distilled water, 40 grams. The stains are touched with a piece of cloth dipped in this mixture, and then rubbed. The spots, even if of long standing, disappear almost instantly, on woolens, cotton or linen. Stains on the skin may be removed by the same method. They first assume a yellowish-white color and then completely disappear.[1]

[1] La Semaine Medicale.

The Offenders.—Professor Cesare Lombroso, of the Chair of Legal Medicine, University of Turin, has produced a new book, "The Female Offender." This is shortly to be followed by another, entitled "The Juvenile Offender." These books appear in English translation as parts of the Appleton's Criminology Series.

A Marriage Centenary.—Vienna journals chronicle the centenary of the marriage of Johann Szathmary and his wife—the former at the age of 117, the latter one year younger. The municipality of Zsombolga, their native village in Hungary, has voted the aged couple a pension in honor of the event, so that there would seem to be no doubt that even in these days of degeneracy one Darby and Joan have survived one hundred years of married life.

The Height of Kindness.—The locality whence the following strange paragraph is supposed to have issued is Syria, in Western Asia. The saying indicates, among other things, how unprepared the down-trodden woman was for any kindness on the part of any male, not excluding the male physician: "An old Bedouin woman who had been restored to health in a Christian hospital, returning to her tribe, said to her husband: 'The doctor was as kind to me as if I had been a man!'"

A Bizarre Method of Prophylaxis of Venereal Diseases.—With a view to diminishing the danger of venereal infection from public women, Letzel proposes to shave the mons veneris of prostitutes found suffering from syphilis or gonorrhea at the weekly inspection. He claims this should be repeated at each weekly inspection and should be continued for two or three years, by which time they will necessarily be driven into other walks of life as their clientele will be fully warned. This procedure will cost about $1.30 yearly for each woman. A French contemporary remarks that this measure would only increase clandestine prostitution, which is much more dangerous.[2]

Child Life Insurance.—The Massachusetts Legislature is just now the battle-ground in regard to this subject, and the philanthropic, or "reform party" has carried on the fight with varying success. The last reported stage was defeat, as is shown by the following item taken from *The Independent* for May 9: "The bill to abolish child life insurance in Massachusetts, which recently passed the State Senate, was defeated in the lower branch of the Legislature on April 30, receiving only 23 votes in its favor against 148 cast by the opposition. The interest in this bill has been very great, and the societies and individuals who have been at the bottom of the attempt at legislation on the subject are considerably chagrined at their defeat."

Tree-trunk Filtration.—An Austrian engineer, M. Pfister, having discovered that the trunks of trees retain the salt of sea water that has filtered through in the direction of the fibers, has constructed an apparatus designed to utilize this property in obtaining potable water for the use of ships' crews. This apparatus consists of a pump which forces the sea water into a filter formed by the tree trunk. As soon as the pressure reaches 1.5 to 2.5 atmospheres the water—at the end of from one to three minutes, according to the kind of wood used—makes its exit from the other extremity of the trunk, at first in drops and then in fine streams. The water thus

[1] Les Nouveaux Remedes.
[2] Le Bulletin Medical.

filtered is potable and quite free from the usual saline taste. It is not stated, however, what amount of use will saturate the fibers to such an extent as to destroy their filtering property.

Dr. David Avison, of Korea.—The Korean Government has requested Dr. Avison, of the Presbyterian Mission in Seoul, to resume charge of the Government Hospital in that city on most favorable terms, and he has consented to do so. Dr. Avison was formerly in charge of this hospital, and was cordially supported by the King; but the obstructions put in his way by subordinate Korean officials compelled him to resign his position. The tide of Japanese victories has, however, secured for Dr. Avison a new and stronger backing from the government in power.

The death of Dr. Hall, a medical missionary to Pyeng Yang has left a vacancy in the Korean supply of educated practitioners; the field is estimated to have a population of 2,000,000.

Charitable Bequests for New York Institutions.—Mrs. Clarissa L. Crane, of New York City, dying left an estate of $400,000, of which about $60,000 is willed to public institutions or benevolent societies. Of these the following charities, remembered by the late Mrs. Crane to the extent of the sums set down against them, have an interest to the medical profession: the Chapin Home for the Aged and Infirm, $10,000—besides which there are residuary donations possible—New York Society for the Prevention of Cruelty to Children, $1,000; New York Society for the Relief of the Ruptured and Crippled, $1,000; New York Skin and Cancer Hospital, $1,000; Home for Incurables in Fordham, $1,000; New York Institution for the Blind, $1,000; Prison Association of New York, $1,000; Women's Prison Association and Home, $1,000, and Children's Aid Society, $1,000.

The Metric System in Army Medical Practice.—On and after January 1, of the present year, it was expected that all prescriptions written by Army medical officers in the course of their official duties would have quantity expressed metrically. Notice of this requirement was given in a circular from the Surgeon-General's office in April of last year, so that every one concerned might familiarize himself with the equivalents of ounces and fluid ounces, drachms, scruples and grains in grams, cubic centimeters and their decimal fractions. It appears, however, that some medical officers found it difficult to get out of the old rut and continued the use of the hieroglyphics and Roman numerals. This was discovered by Surgeon-General Sternberg in his recent inspection of the medical departments of certain military posts. A new circular has therefore been issued, calling attention to this, and stating in positive terms that failure to make use of the metric system will be regarded as a willful disobedience of orders. Inspecting officers are requested to report officially, through regular military channels, any failure to comply with the instructions promulgated relating to the use of the metric system.

To Render Sponges Aseptic.—After many experiments in his laboratory M. Meillere, Director of the Paris Academy of Medicine, gives the following method of rendering sponges aseptic: the shells and stones are first picked out by hand, then the sponges are beaten to remove sand, etc. They are then placed in a 1 to 100 solution of hydrochloric acid for four hours and next washed and immersed in a cold solution of permanganate of potash. Next follows a bath in a solution of sulphurous acid, after which they are washed until all traces of the last acid have disappeared. To preserve until needed, keep them in 5 per cent. carbolic acid, 1 to 100 bichlorid or 1 to 300 of thymol solution. To cleanse sponges which have been used once, they are washed in green soap, rinsed in warm water and carried through the treatment mentioned above. It is advisable to submit them to a bacteriologic examination before using again.[1]

[1] L'Union Medicale.

Suggestions for Expert Witnesses.—The premises, if disputed, from which an expert witness is to deduce his opinion, the General Term of the New York Court of Common Pleas holds, in the case of Frankfort v. Manhattan R'y Co., decided April 1, 1895, manifestly can not be presented as the actual facts of the case, and, in consequence, the expert must assume them as only hypothetically, not absolutely true. An expert witness can not base his opinion upon facts not communicated to the jury, nor upon hearsay, nor upon the evidence of others on the trial. The testimony of experts is not evidence which courts are disposed to accredit beyond the strict sanction of the law.

A Pessimistic View of It.—Referring to the probability that the Russian organizers of the Moscow Congress will adopt French as the official language, the *British Medical Journal* quotes a passage from an article by M. Kartschaguine in the *Vratch* on the unification of languages at international medical congresses, to the effect that medical men of all countries should aspire with all their might to the most intimate union, to the most perfect agreement on all scientific and social questions, that they may be able to prevent and combat evil in the widest sense of the word. Whereupon the *Journal* comments as follows: "The program is wide enough in all conscience, and noble enough to satisfy the most enthusiastic. The picture of the medical profession throughout the world united in a holy brotherhood and fighting against evil generally is beautiful and inspiring, but whether the unification of language would bring about a perfect agreement on all scientific questions, not to speak of social problems, may be doubted. It is possible, indeed, that differences at present hidden by difference of language may be brought into unedifying prominence by the use of a common tongue."

Gonococci in the Vaginal Secretions.—Buttner in the space of three months examined fifty-four prostitutes of Dorpat, to ascertain whether or not they were affected with blennorrhagia. Of these thirty-two were subjected to a semi-weekly examination through the speculum; the other twenty-two were encountered in the hospital. Of these latter, in only six did microscopic examination show the presence of a blennorrhagia. In eleven of the remaining sixteen, or 68 per cent., bacteriologic examination showed the presence of the gonococcus in the vaginal secretion and the same result in nine, 28 per cent., of the prostitutes registered by the police. Among the prostitutes under treatment in the hospital, Buttner made a separate examination of the vaginal secretion, the cervical mucus, and the secretion from the urethra. In the eleven women with manifest blennorrhagia he never found the gonococcus in the vaginal secretion. This microbe was found six times in the cervical mucus and the urethral secretion at the same time; four times in the secretion from the urethra only; once in the cervical mucus only. The author concludes that the examination of prostitutes as it is practiced at present does not give sufficient basis for the establishment of a certain diagnosis.[1]

Liability of Railway Company Tendering Physician's Services.—There is no general legal obligation, according to the Supreme Court of Indiana, resting upon a railway company to provide surgical aid for its injured servants. But such company having assumed the duty to provide a physician, and tender to its injured or sick employes his services, which they are free to reject or accept—a duty which is voluntarily assumed, and one which is not due from the company to its employes—the court holds, in the case of Pittsburg, C. C. & St. L. R'y Co. v. Sullivan, decided April 9, 1895, its liability can not be extended beyond its negligence, if any, in the selection of the physician or surgeon. In other words, it

[1] Jour. de Med. de Paris.

will be liable only, if at all, for its negligence in the employment, in the first instance, of an incompetent person, and not for his negligence or tortious acts in the treatment of its servants who accept his professional services. When this duty is voluntarily assumed by a corporation of this character, it is only bound to exercise reasonable care and diligence, and is not required to select a physician of the highest skill and longest experience in the practice of medicine. If it exercises this required care and diligence, its duty is terminated, and it is not liable for the subsequent malpractice or wrongs of the physician, committed in or about the treatment of its servants.

Hospital Notes.

THE GERMAN HOSPITAL OF PHILADELPHIA.—This institution is about to receive a donation of $1,000, under the will of the late Frederick Mayer, of that city. A like sum is also to be bestowed upon the Lutheran Home and Asylum.

College Notes.

THE board of directors of the College of Physicians and Surgeons of Kansas City, Kan., met May 8, and elected officers for the ensuing year.——The forty-third annual commencement of the Woman's Medical College of Pennsylvania was held in Philadelphia May 8. There were forty-nine graduates.——The Illinois College of Pharmacy, Chicago, has added to its faculty Mr. Henry Kraemer and Mr. J. B. Nagelvoort.——The annual commencement of the Medico-Chirurgical College of Philadelphia was held May 10. There were fifty-five graduates.

Society Notes.

THE Polk County Medical Society, Iowa, held its annual meeting May 7. The following officers were elected for the ensuing year: President, D. W. Finlayson; first Vice-President, Clifton Scott; second Vice-President, C. D. Rawson; Secretary, W. G. Stoner.——The Southwest Kansas Medical Society held a regular meeting in Wichita, May 7. Dr. Hurst, of Peabody, was elected President.——The Fox River Medical Association held a regular meeting at Elgin, Ill., May 7.——The Luzerne Medical Society held a regular meeting at Wilkes-Barre, Pa., May 2.——The Jackson County (Mo.) Medical Society held a regular meeting in Kansas City May 9.——The McLean County (Ill.) Medical Association held their monthly meeting at Bloomington, May 6, Dr. Galloway in the chair. Papers were read by Drs. Parkhurst and Mammen. A committee was appointed to urge the State Medical Society to take some action in the matter of itinerant doctors.——The Trumbull County, Ohio, Medical Society will hold its annual meeting and banquet May 29.——The Muskingum County, Ohio, Medical Society held its semi-monthly meeting in Zanesville, May 10. Dr. G. Warburton read a paper on Bright's disease.——The nineteenth annual meeting of the Southeast Missouri Medical Association was held in Charleston, Mo., May 7, 8 and 9. The following officers were elected for the ensuing year: President, W. P. Howle; Vice-President, J. P. Sebastian; Corresponding Secretary, A. D. Bloomeyer.

Louisville Notes.

BURNETT.—Dr. Theodore L. Burnett, formerly of this city, died at his late home Los Angeles, Cal., April 28, as the result of an accident while on a pleasure trip. His death was due to a fall from a mountain trail in the canôn of the San Gabriel River. On his return down the mountain he slipped and fell and was killed instantly. Dr. Burnett was born March 20, 1862, in Arkansas where his parents were in exile during the Civil War. He was educated in Louisville, at the Rugby School, for many years a noted preparatory school for boys and young men. He attended lectures at the University of Louisville and Hospital College of Medicine during 1887-88, but graduated at the University of New York, Medical Department, March 12, 1889. He returned to Louisville and was in the office with Dr. Preston B. Scott for several years, removing to Los Angeles in April, 1891. He was a frequent contributor to medical literature. At the time of his death, he was Surgeon of the Los Angeles Terminal R'y, and had gained a high standing in his profession. He was married in September, 1893. His remains were brought here for interment.

AMERICAN MEDICAL ASSOCIATION.—The following physicians are gradually returning from the most delightful meeting of the ASSOCIATION in Baltimore: Drs. Carroll Chapman and J. B. Marvin who attended the Baptist Convention in Washington City; Dr. Ap Morgan Vance who visited Philadelphia, New York and Boston; Dr. J. M. Mathews who delivered the annual address before the graduating class of the Buffalo Medical College; Drs. W. L. Rodman, Thos. Hunt Stucky, J. A. Ouchterlonie, Chas. G. Lucas, Dudley S. Reynolds, L. S. McMurtry, Ap Morgan Cartledge, Wm. Bailey, C. W. Kelly.

ACADEMY OF MEDICINE.—At the last meeting the following were elected officers for the ensuing year: President, Dr. Wm. Bailey; Vice-President, Dr. James B. Bullitt; Secretary, Dr. Henry E. Tuley; Treasurer, Dr. W. O. Bailey.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES.—At a meeting of this Association in Baltimore, Dr. J. M. Bodine, Dean of the Medical Department of the University of Louisville, was elected a Vice-President. Louisville has again come to the front, and her four medical colleges have joined this Association compelling attendance upon a four years course of lectures before graduation. This move of Louisville colleges puts the city way up in the list of prominent medical centers and, as always heretofore, Kentucky has taken a stand for higher medical education by its colleges adopting a four years course. There are no better equipped colleges anywhere, not excepting the East, than can be found here: the Kentucky School of Medicine with its new hospital and laboratories, the new buildings of the Louisville and Hospital Colleges, and new dispensary of the University of Louisville.

THE PUBLIC SERVICES.

Army Changes. Official list of changes in the stations and duties of officers serving in the Medical Department, U. S. Army, from May 4, 1895, to May 10, 1895.

Major CLARENCE EWEN, Asst. Surgeon, leave of absence granted on account of sickness, is extended three months, on account of sickness.

Capt. LOUIS W. CRAMPTON, Asst. Surgeon, will report in person to the president of the examining board, appointed to meet at Denver, Colo., on May 14, 1895, for examination for promotion.

Capt. RICHARD W. JOHNSON, Asst. Surgeon, is relieved from duty at Washington Bks., D. C., and ordered to Ft. Huachuca, Ariz., for duty, relieving Major TIMOTHY E. WILCOX, Surgeon. Major WILCOX, on being thus relieved, is ordered to Ft. Schuyler, N. Y., for duty.

Navy Changes. Changes in the Medical Corps of the U. S. Navy for the week ending May 11, 1895.

P. A. Surgeon S. S. WHITE, ordered to the U. S. S. "Bancroft," June 8, 1895.

P. A. Surgeon J. W. BAKER, from the "Enterprise," and as recorder, naval medical examining board.

Asst. Surgeon M. W. BARNUM, resigned from the Navy, May 7, 1895.

Asst. Surgeon ROBERT BOYD, resigned from the Navy, May 8, 1895.

Surgeon M. C. DRENNAN, ordered for examination preliminary to promotion.

Asst. Surgeon H. D. WILSON, detached from the "Vermont," and to the "Monongahela."

Surgeon H. G. BEYER, ordered to the "Monongahela."

LETTERS RECEIVED

Adler, Lewis, H., Philadelphia, Pa.; Antikamnia Chemical Co., St. Louis, Mo.; Arthur, G. S., Portland, Ind.; W. B. Atkinson, Philadelphia.
Blakiston, P., Son & Co., Philadelphia, Pa.; Beaty, R. C., Lebanon, Mo.
Chew, S. C., Baltimore, Md.; Castle, Wilmot & Co., (2) Rochester, N. Y.; Cutler, John A., New York, N. Y.
Dombrowski, P., Peoria, Ill.; Doliber-Goodale Co., Boston, Mass.
Furay, Chas. E., Omaha, Neb.
Galvano Faradic Mfg. Co., New York, N. Y.
Hummel, A. L., Philadelphia, Pa.; Henrotin, F., Chicago, Ill.
Kelly, E., Lebanon, Ky.; Kerchner, B. L., Dalmatia, Pa.
Lehn & Fink, New York, N. Y.; Lyster, W. F., Detroit, Mich.
Mettler, L. Harrison, Chicago, Ill.; Jas. G. McCurdy, Chicago, Ill.; Meyer, H. C. L., & Son, Evansville, Ind.; Madden, J. W., Milwaukee, Wis.; Maulsbury, G. E., Cincinnati, Ohio; Mercer, F. W., Chicago, Ill.; Marsh, P. L., Mt. Pleasant, Pa.; Morse, Lyman D., Advertising Agency, New York, N. Y.; Morrison, E. A., Memphis, Tenn.
Nash, Herbert M., Norfolk, Va.
Rockey, A. E., Baltimore, Md.
Shurley, E. L., Detroit, Mich.; Stover, Charles, Amsterdam, N. Y.; Schmeideman, T. B., Philadelphia, Pa.; Scott, T. A., Algona, Iowa.
Wright, John, San Jose, Cal.
Wegge, W. F., Oshkosh, Wis.